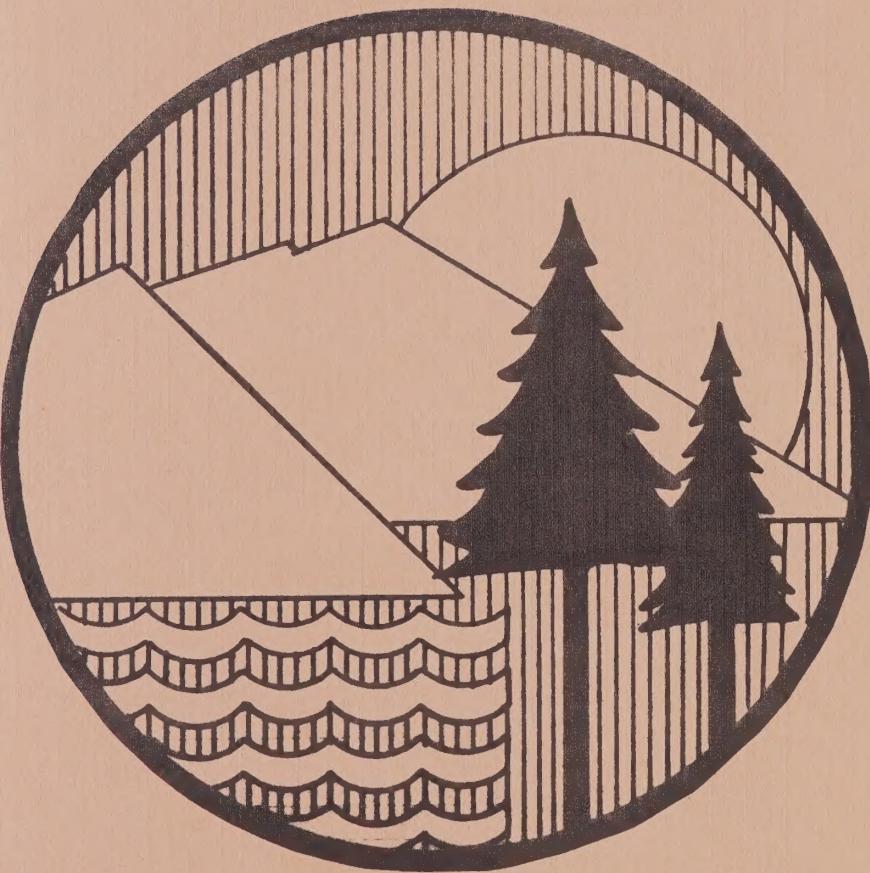


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Tehama County

GENERAL PLAN



RESOURCES GROUP

AGRICULTURAL LANDS
TIMBER LANDS
WATER & WATER QUALITY
AIR QUALITY
WILDLIFE RESOURCES
MINERALS
NATURAL RESOURCE LANDS &
RECREATION
HISTORIC & ARCHAEOLOGICAL
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COMMUNITY DEVELOPMENT GROUP

DEVELOPMENT PATTERN & COMMUNITY ORGANIZATION
WATER SUPPLY, WASTEWATER TREATMENT & SOLID WASTE DISPOSAL
SCHOOLS, LIBRARIES & RECREATION FACILITIES

Adopted: March 1, 1983

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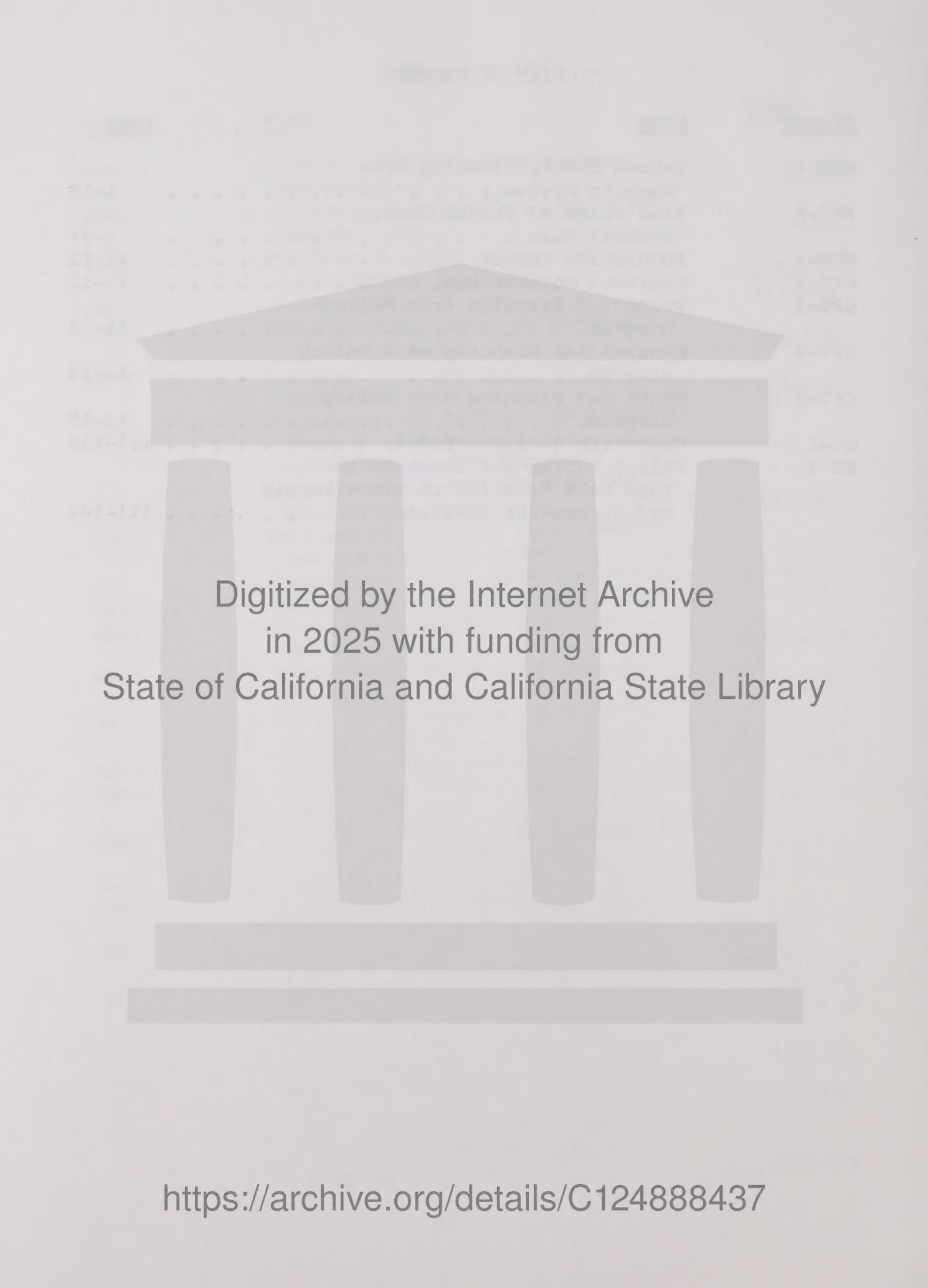
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Preface

Purpose

THE GENERAL PLAN AND ITS PREPARATION

The General Plan is a tool to be used by Tehama County residents, acting through their elected officials, to initiate and respond to change and growth. The Plan is developed to respond to the shared needs of Tehama County residents within a framework that includes the protection of the interests of both current citizens and future generations; promotion of a healthy, safe, attractive and prosperous environment; protection of scarce or environmentally sensitive resources; and development of effective public services at the lowest possible cost. By State law, each city¹ and county in California is required to prepare and adopt a General Plan. The primary function of the General Plan is to allow the County to consciously consider and shape its own destiny by setting forth the County's goals, objectives, and policies regarding future growth and development.

As required by state law, a number of subject areas must be addressed in the Plan. These include: land use, circulation, housing, open space, conservation, safety, seismic safety, noise, and scenic highways.

In addressing these subject areas, a General Plan is general, comprehensive, long-term, and internally consistent.

- As the name implies, the Plan is general in that it provides broad guidelines for development in the County, rather than site-specific and detailed instructions on how and where to build. The Plan's intentions are carried out by regulatory tools such as zoning and subdivision ordinances. The Plan should be flexible and allow public and private investors broad discretion in making land use decisions, while at the same time assuring that public policies and goals are realized.

¹ Government Code, Section 65302.

- The Plan is comprehensive in that it addresses a wide range of issues that will affect the County's desirability as a place to live and work, and the Plan must cover all territory within the boundaries of the County. The Plan provides the County with the means to consider all these concerns in an integrated and coordinated fashion.
- The Plan is long-term in that it looks into the future -- not 2 or 5 years, but typically 15-20 years. The Plan represents both an evaluation and vision of the future, and its goals and policies are aimed at guiding development in that direction. In the absence of such a perspective, development proposals would be approved one-by-one, in a piecemeal fashion. Such an approach can lead to serious problems. For example, development must occur with full realization of its cumulative impacts on the capacity of water supplies, roadways, recreation areas, etc. A long-term perspective can help identify and plan for these types of constraints and needs.
- The Plan is internally consistent in that the goals, objectives, policies, and implementation programs do not contradict one another but rather present a comprehensive, uniform program for development. Similarly, the assumptions and projections used in the General Plan should be uniform and consistent. Without consistency, citizens will be uncertain about the policies and standards of the County; land-owners, business, and industry will be confused about the priorities and standards contained in the Plan, and this in turn will make their own decision-making difficult; other public agencies may use the confusion in the General Plan to defend their own viewpoints as to how County lands should be used. Beyond this, inconsistencies in the General Plan leave the County open to litigation to resolve what already should have been settled.

The General Plan should not be taken as the final statement of the County's vision. With time, its population will change, its goals will be redefined, and the physical environment in which its residents live and work will be altered. The County will undergo change continuously and at best, the Plan represents a summary of the activities of planning and hopes for the future at this particular point in time. In order for the Plan to be a useful document, it must be periodically revised to respond to and reflect changing conditions. The concluding section of this PREFACE discusses methods of amending and updating the General Plan.

HISTORY OF LAND USE PLANNING AND REGULATION IN THE UNITED STATES, CALIFORNIA, AND TEHAMA COUNTY

UNITED STATES. The exercise of land use planning and regulatory authority by government is an exercise of the "police power" or the power to enact laws to promote the public health, safety, morals, and general welfare. In the face of a Colonial heritage of highly centralized land use controls exercised either directly by the Crown or its official representatives, the authors of the United States Constitution expressly reserved the police power to the States. Therefore, the United States is unique among nations in that it has no national land use policy, planning, or regulatory activity.

The Federal Constitution does, however, place limits on the exercise of the police power through certain guarantees of individual rights and prohibitions of government actions. From the perspective of land use planning and regulation, the most important are the rights of substantive and procedural due process and prohibitions against denial of equal protection of the laws and the taking of private property without just compensation.

The scope of these constitutional limitations as they apply to land use regulation was the subject of the famous case Village of Euclid, Ohio v. Ambler Realty Co., decided by the United States Supreme Court in 1926. This case established the basic constitutionality of zoning regulations and set the framework by which local governments regulate land use. The origins of local government land use regulation are briefly discussed below.

CALIFORNIA. When California entered the Union in 1850, control of land use in the United States was still largely in private hands. Although it was within their power to do so, the States, including California, chose not to exercise the police power over land use. Instead, private landowners made the decisions regarding the use of their lands, and at times imposed controls on other landowners by bringing nuisance actions against their neighbors or by imposing deed restrictions on subsequent owners of their property. The public nuisance action remained an infrequent but potentially powerful source of restrictions on private land uses.

This lack of public involvement in land use control reflected the conditions and circumstances occurring at the time. As long as the frontier remained open and the population of the nation was relatively diffuse, private control over land use was satisfactory. With the change in circumstances brought about by the closing of the frontier, rapid industrial growth, and substantial population increase due in part to immigration, the need for public land use controls emerged. In the two decades between 1905 and 1925, public control of land became commonplace throughout the United States, especially in the densely populated urban areas.

California reflected this national trend. In keeping with its strong tradition of home rule and following the pattern established by other states, California delegated its police power authority over land use matters to its local governments through legislation enabling zoning regulations and local plans. The Subdivision Map Act has its origins in legislation enacted in 1907. Ten years later, California enacted its initial zoning law. Again at another ten year interval, legislation enabling the preparation of local general plans was passed.

Through this enabling legislation, the State has shaped the exercise of land use controls by local government. However, ultimate responsibility for the substance and enforcement of local plans and regulations rests exclusively with city and county governments.

In the course of their practical application and testing against federal and state constitutional standards, several important legal principles have been established by the courts. As a prerequisite to understanding land use planning and regulation in Tehama County, it is important to examine these principles of law.

The term "highest and best use" is frequently used in real estate appraisals to describe some particular optimum use of land. It is a well established principle that local land use regulations are not required to provide for the highest and best use of a particular piece of property. As long as the applicable regulation is the result of a proper zoning action, all it must provide is some reasonable use of the property, which use may yield an economic return substantially less than highest and best use. This principle was most recently affirmed by the California Supreme Court in its decision in Agins v. City of Tiburon, 24 C.3d 266(1979).

This same case also addressed the issue of a property owner's legal remedy in the event that a regulation unconstitutionally and impermissably deprives him/her of substantially all reasonable use of his/her property, thus effecting a "taking" of the property without just compensation. The Supreme Court ruled that an inverse condemnation action seeking² money damages is inappropriate. Instead, mandamus or declaratory relief were held to be the appropriate remedies (Agins v. City of Tiburon at 273).

This holding of the California Supreme Court received considerable discussion within the context of two U.S. Supreme Court cases - Agins v. City of Tiburon,³ and San Diego Gas & Electric v. San Diego.⁴ In each case, the Supreme Court was not required to decide whether a State may limit the remedies available to a person whose property has been "taken" by an excessive public regulation to those specified by the California Supreme Court. Thus, the holding of the California Supreme Court in Agins was not affected.

Once zoning regulations have been applied to property, two important principles address a property owner's expectations with respect to the continuance of these regulations. In general, the courts hold that a property owner has no vested or legally protected right to use or develop his property, except in accordance with current zoning regulations. A property owner "assumes the risk" of a change in the current regulations and he is subject to the new regulations except to the extent that his rights in the prior zoning regulations have vested.⁵ Under California law, rights in zoning vest only

¹ Mandamus generally refers to a decree issued by a court directing a public official to perform or cease performing a certain action.

² Declaratory relief generally refers to a decree issued by the Court which establishes the rights of parties to a dispute but does not order anything to be done.

³ U.S. (1980), 100 S. Ct. 2138.

⁴ U.S. (1981), U.S., 101 S. Ct. 1287.

⁵ AVCO Community Developers v. Coastal Commission (1976) 17 Cal.3d 785; Jones v. City of Los Angeles (1930) 211 Cal. 304, 259 P. 13; Cow Hollow Improvement Assn. v. Board of Permit Appeals (1966) 245 Cal. App. 2d 160, 53 Cal. Rptr. 610; Anderson v. City Council of Pleasant Hill (1964) 299 Cal. App. 2d 79, 40 Cal. Rptr.

when a property owner has performed substantial work and incurred substantial liabilities in good faith reliance upon permits issued under the zoning regulations.¹

The recordation of a subdivision map showing streets, lots, and blocks does not prevent a local government from rezoning lands covered by the map.² The act of subdividing land under the Subdivision Map Act does not convey a vested right because this act alone does not create a right to complete a development, including structures.³

Just as it is a well-established principle of law that property owners have no legally protected or "vested" rights to the maintenance of the existing zoning of property, it is also well-established that a diminution of property values as the result of a proper rezoning is not legally compensable by the cognizant government agency. Likewise, government cannot expect payment for enhancement of property values occasioned by rezonings. These principles are founded on the importance of a local government's ability to exercise its police power to advance the legitimate interests of the whole community. These principles are also founded on the fact that whatever value is lost or gained by a rezoning was initially gained or lost through a prior exercise of the police power.

The legal principles described above govern land use planning and regulation at the local government level. The following section discusses the history of land use planning in Tehama County.

TEHAMA COUNTY, "Following the appointment of a Planning Commission shortly after the second World War, the activities of the Commission increased greatly each year. A Zoning Enabling Ordinance, Subdivision Ordinance, Setback Ordinance, Master Plan of Parks and Recreation and numerous other items were prepared by the Commission and adopted by the Board of Supervisors. By 1961, with a marked increase in subdivision activity and major freeway, public water development, recreation and other projects to be integrated into the County development pattern, it became apparent that an accelerated planning program was necessary to keep plans ahead of developments. An application for an Urban Assistance grant was filed in that year, and the first County Master (General) Plan project was started early in 1962. The purpose of that project was to provide for the County the most essential elements of a General Plan and complementary Specific Plans to ensure that the basic guides for good growth⁴ and orderly development would be available during the critical years ahead."

¹ The basic principle of vested rights is stated in AVCO Community Developers, Inc. v. South Coast Regional Comm'n (1976) 17 Cal. 3d 785, 791, 132 CR 386, 389:

It has long been the rule in this state...that if a property owner has performed substantial work and incurred substantial liabilities in good faith reliance upon a permit issued by the government, he acquires a vested right to complete construction in accordance with the terms of the permit.

² Gisler v. County of Madera(1974) 38 Cal. 3d 303.

³ Oceanic California v. Coastal Commission(1976) 63 Cal. App. 3d 57.

⁴ The General Plan of Tehama County, 1970, page 2.

in 1970, Tehama County revised this earlier plan. The revised plan comprised land use, circulation, recreation, and public services and facilities elements. Four years later, the land use element was again revised, and conservation, open space, safety, seismic safety, noise, and scenic highways elements were adopted. A housing element was adopted in 1971.

The Zoning Code and Land Division Ordinances were most recently revised in 1975.

As explained elsewhere, this document contains revised land use, circulation, open space, conservation, and public facilities elements. The existing, adopted safety, seismic safety, noise, and scenic highways elements and the housing element, which is currently being revised, are incorporated by reference into this document.

Summarizing the above discussion, several important conclusions may be drawn concerning land use planning and regulation in Tehama County. One, land use planning and regulating the use of privately owned lands through zoning and subdivision ordinances is legal and proper under California law. Two, provided they are based on public policies expressed in the General Plan and are the result of a proper zoning action, zoning regulations may deny private lands their highest and best use, as long as they allow some reasonable use. Three, subject to any rights which may have vested, zoning regulations may be modified without any need to compensate property owners whose land values are thereby diminished. Finally, in situations where land use regulations are in fact determined to substantially deprive a property owner of any use of his/her land, the proper remedy is a judicial decree declaring the regulation to be invalid and directing cognizant public officials to take appropriate action.

RELATIONSHIP BETWEEN THE GENERAL PLAN AND THE LAND USE REGULATORY SYSTEM

The General Plan presents a policy framework within which Tehama County reviews proposals for developing its resources. The Policy statements contained in the plan must be brought about of "implemented" through a series of clear statements concerning the standards which must be met prior to development, and programs for financing, operating, and maintaining facilities that service existing and new development. California law provides local governments with a variety of ways to implement general plans. These implementation tools must, however, be based upon the policies contained in the plan. Provisions of state planning law requiring consistency between the general plan and its implementation programs are briefly described below.

ZONING REGULATION. Section 65680¹ requires that the County's zoning ordinance be consistent with its general plan. Consistency may be achieved only if the County has adopted a general plan and the various land uses authorized by the zoning ordinance are compatible with the objectives, policies, general land uses and programs specified in such a plan. This section also requires that when the General Plan is amended, the zoning ordinance must likewise be amended as is necessary to maintain consistency with the plan.

¹ Unless otherwise indicated, all references in this discussion are to the Government Code.

Section 65566 requires that any zoning action by the County which acquires, restricts or regulates the use of open-space land or any interest in such land must be consistent with the County's open space plan. Closely related is Section 65567 which requires that the County's open space zoning ordinance, the adoption of which is mandated by Section 65910, also be consistent with the open space plan. Section 65911 specifies an additional criterion to be applied in granting variances from the terms of an open space zoning ordinance.

Section 65853 requires that the planning commission provide the Board of Supervisors with a written recommendation on a proposed zoning ordinance and all amendments of an existing ordinance. As required by Section 65855, this recommendation must include discussion of the relationship of the proposed ordinance or amendment to the general plan.

State law has not yet addressed the issue of consistency between the general plan and the various discretionary land use entitlements available under the zoning ordinance, i.e., variance, use permit, planned unit development, design review, etc. The one court decision (Hawkins v. County of Marin (1976) 54 C.A.3d 586) which could offer some guidance in this area is subject to differing interpretations. Reflecting on the overall intent of consistency between the General Plan and the zoning ordinance, sound planning practice would agree that the granting of these entitlements should be based on a finding of consistency with the plan.

SUBDIVISION REGULATION. Section 66473.5 provides that the County shall not approve a proposed subdivision map unless it finds that said subdivision, including its design and proposed improvements, is consistent with the General Plan. In a manner similar to zoning regulations, consistency may be found only when the County has adopted a plan and the proposed subdivision is compatible with the objectives, policies, general land uses, and programs specified in the plan. It is important to note that this requirement applies to subdivisions for which parcel maps, as well as tentative and final maps, are required.

Section 66474 is the converse of Section 66473.5, but it applies only to the approval of tentative and final maps. This section states that the County shall deny approval of such maps if it finds that the proposed map, or the design or improvement of the proposed subdivision shown on the map, is not consistent with the General Plan.

Although somewhat confusing as stated in the law, the two above sections also apply to condominiums, community apartment projects or stock cooperatives which must submit tentative and final maps (see Section 66426). Unless the General Plan contains definite objectives and policies specifically directed at the conversion of existing buildings into condominium projects or stock cooperatives, these two sections, 66473.5 and 66474, do not apply to such conversions (see Section 66427.2).

Section 65567 requires that a subdivision map may not be approved unless it is consistent with the open space plan.

The County may require the dedication of land, the payment of in lieu fees, or some combination of the two, for park or recreational purposes as condition of the approval of a final or parcel map, but only if the General Plan contains a recreational element and the dedicated facilities conform to definite principles and standards contained in the element (see Section 66477(d)).

Finally, the County may require the reservation of land within a subdivision for parks, recreational facilities, fire stations, libraries, or other public uses, provided such requirements are based on appropriate general plan elements (see Section 66479).

CAPITAL IMPROVEMENTS. Section 65401 authorizes the Board of Supervisors to require the preparation and submission by County officials and agencies of lists of all public works projects recommended by them for study or construction during each ensuing year. This requirement also applies to special and school districts whose jurisdictions lie wholly or partially within the County. Upon submission, such lists must be integrated by the County into a coordinated program which must be submitted to the planning commission for review as to its conformity with the General Plan.

Section 65402 requires review by the planning commission as to conformity with applicable elements of the General Plan of:

- acquisition of lands for public purposes
- disposition of lands
- street vacations
- authorization or construction of public buildings or structures.

BUILDING AND HOUSING CODES. Section 65567 provides that building permits must be consistent with the open space plan.

The State Housing Law (Health and Safety Code Sections 17910 *et seq.*) requires the County to adopt regulations imposing uniform industry codes. This law also imposes special standards, which may be more burdensome than the uniform industry codes, designed to protect against certain types of hazards (fire, noise, earthquakes, unstable soils) and to achieve certain resource goals (energy conservation). The County may adopt regulations and standards at variance from those mandated by the State Housing Law if justified by local conditions. Although not explicitly required by the State Housing Law, the General Plan is an especially appropriate vehicle for documenting such local conditions and specifying the necessary regulatory response in order to justify variances from state law.

ENVIRONMENTAL IMPACT PROCEDURES. Section 15080(c) of the State EIR Guidelines requires that the initial study of a project consider whether it is compatible with the General Plan. A recent amendment of the Guidelines has added subsection 15142(b) which provides that an EIR must discuss any inconsistencies between the proposed project and the General Plan. Appendix G(a) of the Guidelines states that a project will normally be found to have a significant effect on the environment if it will conflict "with adopted environmental plans and goals of the community where it is located." A detailed discussion concerning this relationship is contained below.

OTHER CONSISTENCY REQUIREMENTS. Listed below in capsule form are other consistency requirements contained in state law which at some future date may apply to Tehama County:

- Health and Safety Code (HSC) Section 33331, consistency between General Plan and redevelopment plan.
- HSC Section 34326, consistency between General Plan and housing projects.
- HSC 34711, consistency between General Plan and housing for developmentally disabled, mentally disordered, and physically disabled.
- Streets and Highway Code Section 32503, consistency between General Plan and parking facilities.

RELATIONSHIP BETWEEN THE GENERAL PLAN AND THE CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)

The Tehama County General Plan is an important document in that it affects the way both the natural and man-made resources of the County are utilized. If any aspect of the general plan, either individually or cumulatively, may lead to a significant affect on the environment of Tehama County, regardless of whether or not its total effect is adverse or beneficial, a draft Environmental Impact Report (EIR) must be prepared.¹ The required EIR for the Tehama County General Plan has been integrated directly into the Plan.

Section 15148 of the State Government Code allows a jurisdiction this option rather than preparing a separate EIR document, provided that the Plan contains a special section identifying where each requirement is addressed. This approach allows the citizens of the County to understand environmental impacts of all policies as they are presented in the Plan. Consequently, the EIR section of the Tehama County General Plan differs from a conventional EIR and actually functions as an index to Plan policies. Section IV of the Plan contains the draft EIR and allows the reader to cross reference those sections of the plan and its appendices which satisfy CEQA requirements for an EIR.

CITIZEN PARTICIPATION

As part of the General Plan revision, a citizen participation program was used to provide advisory comment on important County-wide issues and to identify significant objectives the community felt should be addressed by the Plan. After soliciting applications for a citizens advisory committee, the Tehama County Board of Supervisors appointed 45 persons to the Citizens of Tehama Advisory Committee (CTAC). Members of the Board of Supervisors and County Planning Commission also served on CTAC to facilitate a monitoring of the program's progress. During the one year plan revision program, CTAC met as a formal group on ten separate occasions at various locations in the County. In addition to these meetings, CTAC members met on an informal basis with the individuals and/or groups they represented. Detailed minutes and attendance records for CTAC meetings are available for review at the Tehama County Planning Department.

¹Title 14, California Administrative Code, Section 15080.

CTAC provided a forum for the expression of views on planning issues facing Tehama County. It was not the purpose of CTAC to resolve conflicting points of view or to achieve consensus on all issues, although the occurrence of a consensus on a particular issue was always welcomed.

The role of CTAC was that of an advisory rather than a policy-making body. Resolution of issues and subsequent policy making are the exclusive responsibility of the Board of Supervisors, who are the ultimate decision makers with regard to the recommended goals, objectives and policies contained in the Revised General Plan Elements, prepared by the consultant.

General Plan Organization

ORGANIZATION AND USE OF THE TEHAMA COUNTY GENERAL PLAN

The General Plan for Tehama County comprises three documents:

- Document One - The Revised General Plan Elements. The scope of the General Plan Revision work program required the preparation of draft Land Use, Open Space, Conservation, Circulation, and Public Facilities elements. Document One, which you are now reading, contains the five revised elements organized and consolidated into two element groups: Resources and Community Development. Each element group contains an introduction which discusses its constituent elements and how they relate to elements contained in other element groups. This document includes all of the goals, objectives, policies, and implementation programs of the plan. Also, it includes explanations of the land use maps, how they were prepared, and how they should be used. The General Plan Land Use Maps are appended at the end of this document.
- Document Two - The Existing General Plan Elements. The existing Seismic Safety, Noise, Scenic Highways, Safety and Housing Elements stand as separately bound documents which constitute the "Existing General Plan Elements." In order to satisfy California State Planning Law, Document One incorporates those existing elements by reference and contains general recommendations for their revision to insure an internally consistent and integrated General Plan.
- Document Three - The Tehama County General Plan Technical Appendix. This document includes the data and analysis of the following Technical Reports which are separately bound and were issued during the plan revision process:
 - #1 Planning Issues and Preliminary Objectives
 - #2 Population, Housing, and Employment Projections
 - #3 Development Suitability Analysis
 - #4 Plan Alternatives

The series of reports stands as a technical appendix which includes all of the technical data on which the General Plan revision was based.

Detailed data maps that provided background information for the plan revision also are included within the technical appendix and are available for inspection at the Tehama County Planning Department.

KEY TERMS AND DEFINITIONS

Goals, objectives, issues, policies, and programs for implementing the Tehama County General Plan play an important role in understanding the process used to arrive at the Revised General Plan Elements. These terms are briefly defined below together with examples of their application.

Goals: A goal is an orientation. It provides the community with a direction. Goals are conditioned by values which the community holds to be important. An example of a community goal could be "To promote a quality living environment in Tehama County." We see that goals represent an ideal condition and are statements of desirable conditions.

Objectives: An objective is an end or point to be reached. It is capable of attainment and measurement. For each goal there may be one or more related objectives. For example, if our goal is to promote a quality living environment, the following related objective might apply, "Prevent significant deterioration to air resources which would adversely impact the health of County residents."

Issues: Planning issues are usually identified when the community perceives that existing or future conditions vary significantly from commonly held goals and objectives. By examining planning issues identified by the community, we can better understand which goals and objectives most appropriately meet the County's stated desirable orientation.

Policy: Most plans are not implemented because they lack an effective mechanism to move from goals and objectives to implementation. In the planning process the mechanism to accomplish this is called a policy. Policy is a governing principle or course of action. It is the broad framework for guiding governmental action. Policies take ideas from the conceptual level of abstraction and express them in statements of intent or action. Policies can be measured and are often expressed in text, maps, or diagrams. An example of a policy relating to the previous examples of goal and objective could be, "All stationary (e.g. industrial) sources of air pollution shall meet California's Ambient Air Quality Standards."

Implementation: Implementation refers to a series of practices, e.g. development plans and proposals for financing, operation, and maintenance. These practices are intended to describe the actions necessary to accomplish policies within a definite time period. Examples of implementation programs for air quality might include an air quality management plan to monitor all stationary sources of air pollution.

Additional terms have been used to describe Tehama County's community organization. These are defined below.

Urban Center: A community which provides a full array of urban services to contiguously developed incorporated areas. Urban Centers can be character-

ized as having dwelling units on building sites which may be served with waste-water treatment and water systems. Highly developed areas will have such features as street lights, sidewalks, curbs, and gutters. Urban centers contain major employment and retail trade centers.

Town Center: A community which provides most urban services, including small water distribution systems, school, law enforcement via the County Sheriff, and fire protection by paid volunteers. Town Centers function as secondary employment and retail trade centers.

Rural Community Center: A community which provides few of the basic services normally associated with either Urban or Town Centers. Available service levels approximate those found in other unincorporated areas of the County, with wastewater treatment by individual septic tanks and wells. Additional services include law enforcement by the County Sheriff and fire protection by paid volunteers. Rural Community Centers provide minor employment opportunities with limited or no retail trade centers.

Rural Service Center: A community which provides limited or no urban services. Residents must often travel to Urban or Town Centers to meet their primary commercial and service needs. Rural Service Centers provide minor employment opportunities related primarily to agricultural support activities. Agricultural support includes the sale of agriculturally related construction materials and supplies, agricultural and farm equipment and supplies, and agriculture-related service providers.

The remainder of the definitions which follow are intended to provide an understanding of the concepts used throughout the Plan's text.

Development: The actual use or commitment of land for the construction of houses, commercial and industrial structures, public service facilities, and related structures, thereby accommodating population growth and associated employment growth within Tehama County. Implicit in this definition of development is the commitment of land to a particular residential, commercial, industrial, or public service use such that any other use of the land is precluded for at least the foreseeable future and would require some type of redevelopment. Under this definition, lands used for agriculture, timber production, and open space are not considered as developed. Also, development does not mean the parcelization or subdivision of land into homesites which may at some future date be provided with services and built on. This distinction is important because the mere creation of homesites does not accommodate growth.

Existing Land Use Map: The purpose of an existing land use map is to document land uses as they currently exist. As a practical matter, an existing land use map is obsolete at the moment of its publication because land uses are continually changing. Existing land uses are usually mapped on a parcel-specific basis. Because it is a documentation of factual conditions, an existing land use map has no regulatory effect on land uses.

General Plan Land Use Map: A general plan land use map is definitive statement of land use policy. Upon its adoption, it becomes the land use policy statement for the adopting government entity. As such, this policy must be

reflected in the zoning ordinance maps and other legal instruments which regulate land use.

Zoning Ordinance Map: A zoning ordinance map is a parcel-specific statement of how lands may be used in the present and the near future. As a legal instrument, the zoning map has immediate force and effect. In contrast, the general plan land use map is a generalized, long-term statement of land use. It does not have direct and immediate effect on land use. The function of a general plan land use map is to provide a policy framework that must be reflected in the zoning ordinance and specific plans, which are the primary mechanisms for implementing these policies. Since it is a long-term statement of land use policy, it is possible that the ultimate use of a particular land area, as shown in the general plan, may differ from the existing use currently permitted by the zoning ordinance map. As prescribed by phasing mechanisms contained in the plan, the zoning ordinance must be revised at the appropriate times to reflect the long range land use policies in the plan.

Natural Areas: Includes land and water that has substantially retained its natural character, which is an important habitat for plant, animal, or marine life. Such areas are not necessarily completely natural, historical, scientific, or paleontological features, or for the appreciation of natural features.

Natural Resources: Air, land, and water and the elements thereof which are valued for their existing and potential usefulness to man.

Planning Area: The air, land, and water resources within the jurisdiction of a governmental agency.

Public Facilities and Services: Projects, activities, and facilities which the planning agency determines to be necessary for the public health, safety, and welfare.

Riparian: Of, pertaining to, or situated on the bank of a river or other body of water.

Significant Habitat Areas: A land or water area where sustaining the natural resource characteristics is important or essential to the production and maintenance of aquatic life or wildlife populations.

HOW TO USE THE PLAN

The land use maps appended to this document are the first place to look for information on the intent of the plan. The maps show the future general arrangement and extent of land uses.

The user of the plan should refer to this document for written explanations of the land use maps and for other written policies that affect the location, design, and use of land and facilities in the County.

The Tehama County General Plan Technical Appendix is useful in three ways:

- It contains the text and identifies the maps that are the basis for written policies. For example, the written policies address such subjects as agricultural lands, open space, and wildlife areas. The technical data includes maps and text describing the location and nature of these factors.

- It provides a wealth of information to help the reader understand the forces that shape the development of the County.
- It will provide planners with additional information that can be used in preparing special plans and revising the General Plan.

POLICY STATEMENTS AND MAPS. The land use maps attached to the plan show the spatial or geographic application of the land use policies of the revised Tehama County General Plan. However, they do not illustrate all the policies that regulate land use in the County. This is due both to the scale of the maps and the fact that some policies cannot be expressed geographically.

Tehama is a large county, and in order to collect and analyze data as part of the plan revision a two-tiered mapping system was established. The first level identifies two sub-areas, designated as Eastern and Western, which are mapped at a scale of 1:62,600, or 1 map inch equal to 1 ground mile. The second tier shows greater detail and divides the remaining central corridor of the County into three areas - North I-5, Central I-5, and South I-5 - mapped at a scale of 1:24,000, or 1 map inch equal to 2,000 ground feet. These five planning areas and the "two-tiered" mapping system are shown in Figure PRE-1. At such scales, many land use designations would not be visible. As noted above, many policies cannot be represented in map form, so written policies are included as part of the plan. Although these written policies are not mapped, they have as much importance and effect as the policies graphically presented on the land use maps.

The written policy statements contained in the plan should be studied to determine policies that apply to a particular area of land or to particular land use activities. These statements also explain how the plan was prepared and why certain recommendations were made. Some of the policies refer to information on natural resources, public facilities and services, and natural hazard factors which are contained in the Technical Appendix. Information there is presented in written and mapped form. Most of the mapped information is available for inspection at the Tehama County Planning Department on larger, more detailed maps. Table PRE-1 presents a concise summary of the General Plan Data Base Mapping Inventory.

The revised land use plan maps are a general representation of the future extent and arrangement of land uses. They are general in the sense that the boundaries between land uses are flexible unless they clearly follow the lines of property, surveys, or political jurisdictions or the edges of physical features. They are also general in the sense that land uses within the mapped areas may diverge slightly from the indicated land use if local conditions dictate and if the basic intent of the plan, as expressed in the objectives and policies, is met.

In reviewing the land use maps, it should be remembered that nothing in the plan prevents any existing land use from continuing. Even if the land use plan designates an area for a completely different land use than presently exists on the site, the existing land use can remain indefinitely. However, any change in that land use must comply with the non-conforming use regulations identified in the Tehama County Zoning Code.

USE OF THE PLAN BY TEHAMA COUNTY OFFICIALS, PROPERTY OWNERS AND RESIDENTS, AND BY INTERJURISDICTIONAL GOVERNMENTAL AGENCIES

The General Plan is designed to be used by elected and appointed County officials on a daily basis in making decisions with direct or indirect land use implications. It is not designed for infrequent consultation and failure to use the plan will quickly cause it to become out of date and irrelevant.

County residents and property owners are expected to be major users of the plan. Members of these groups may choose to use the plan as it regards a particular geographic area or as it addresses a particular subject of interest to them. In either instance, the plan must be viewed in the context provided by all other relevant objectives and policies. It is especially important to note that a major function of the plan is to inform property owners of the policies applicable to their lands and the long-term implications of these policies. To this end, public access to and understanding of the plan is encouraged and the planning department staff will be available to the public to answer questions concerning the plan. The Tehama County General Plan is designed to be used by officials and staff of other government agencies - federal, state, and local - to provide a framework for interjurisdictional coordination of land use planning efforts.

Successful implementation of Tehama County's General Plan is dependent upon recognizing the interjurisdictional context in which the plan must operate. During the plan revision program, an Interjurisdictional Committee was established to provide a forum for the exchange of information on subjects of mutual interest for land use planning in Tehama County. As part of Tehama County's on-going planning process, it is important to continue to review with other government agencies and special districts the implications of County actions on land use and, vice-versa. Accordingly, the Interjurisdictional Committee established as part of the plan revision should continue to be used for coordination of land use planning activities.

Methods of Amending and Updating the General Plan

THE HORIZONS FOR UPDATING THE GENERAL PLAN

The general plan has a long-range time frame. Traditionally, general plans were end-state oriented and projected an ultimate land use pattern and established an arbitrary date for its achievement. End-state general plans presented many problems, the most significant of which were unresponsiveness to changing conditions and the difficulty of implementing an end-state land use pattern which provided little or no guidance concerning the day-to-day phasing of development.

This type of "end-state" plan has largely been replaced by plans using time frames of 10, 15, or 20 years. The Tehama County General Plan reflects a twenty year time horizon. Implicit in this approach is the requirement that the Plan be periodically reviewed and updated to reflect changes in the land

use supply and demand. While the General Plan should be systematically reviewed on an annual basis and amended as necessary, at least every five years the growth phasing aspect of the plan should also be reviewed to see if the land use pattern is attaining the objectives and goals of the plan.

The periodic update of the plan is also important in order to maintain at least a 15 to 20 year supply of land in the developable land inventory, as well as to maintain a 15 to 20 year time horizon perspective, as shown in PRE-2. It must be emphasized that periodic review of the Plan is not intended to be a total overhaul. Once adopted, the General Plan establishes a basic policy framework which must be followed over time. The purpose of reviewing the Plan every five years is to allow it to adjust in response to changing conditions, both internal and external to the County; the availability of more recent planning data; and shifts in community values. Only under the most extraordinary circumstances, such as a major local disaster, a national emergency, or the complete failure over a long span of time to periodically review the Plan, will a thorough and total overhaul be necessary.

DATA REQUIREMENTS AND SUGGESTED METHODOLOGY FOR PLAN UPDATES

The concept of monitoring supply and demand for developable land to ensure their continued land availability is a major theme of the revised Tehama County General Plan. Because of this relationship, it will be increasingly important that the Tehama County Planning Department monitor the rate at which the supply of residential land is consumed and the extent to which the actual population growth "fits" the projected population growth. If actual population growth over time is greater than the projected growth, then it will be necessary to move lands from the growth reserve into the various residential land use classifications.

As an initial step in establishing the monitoring process, the Planning Department should define geographic planning area boundaries within which data can be collected in a consistent manner over time. For purposes of the General Plan Revision Program, Tehama County was divided into five planning areas on the basis of physical features, natural and man-made boundaries, natural resource locations, and with consideration to population distributions within established 1980 Census Enumeration Districts. These planning areas worked well and the Tehama County Planning Department may wish to continue to use them. Modifications, however, are necessary to obtain greater accuracy in collecting data on population, development rate and location, school enrollment, and updated land use. Possible modifications include:

- During the next Census Bureau's Local Review Program, the Tehama County Planning Department should review and make recommendations for alterations to the Geographic Areas Reference List which shows statistical areas for which census counts are taken. Changes should be made as necessary to reflect planning area boundaries.
- Consideration should be given to the Assessor's Book Boundaries. The information available through these boundaries will be greatly enhanced by efforts currently underway to computerize use code information of vital importance to subsequent plan revisions.

- Special district and school district boundaries should also be consulted in order to obtain accurate school district enrollment by planning area, as well as public facility availability in relation to building permit data by structure type and location.

Once this task is completed, the planning department must monitor the demand for land and make periodic reports and recommendations to the Board of Supervisors concerning the County's available land supply and public services and facilities available to service new and existing development. A potential methodology for monitoring the land supply and evaluating the cost implications for accommodating growth should include the following:

- The County Planning staff should prepare projections of new development for five year periods at each annual plan review. These projections should identify population growth expected to occur in each planning area. Anticipated residential densities based upon the General Plan's residential land use designation and associated vacant lot inventories, as well as anticipated commercial and employment areas, should also be identified. These projections should be reviewed by homebuilders of the community and by the planning staffs of the cities of Red Bluff, Corning, and Tehama.
- Maps should be prepared showing the above identified development projections for each planning area. Each County and City department should receive a copy of the planning area maps and then prepare their own estimates of the costs required to accommodate the projected development. The cost estimates should identify both new facilities and services that would be needed totally or in part to accommodate the new development, based on maintaining the service level presently provided to existing residents. In these responses departments should also identify the annual operating and maintenance costs required to support expanded services and facilities.
- Based on the departmental requests and further input from each department, each requested new service and facility should be assigned a specific "area of benefit." These benefit areas should then be disaggregated to show what portion of the new service or facility would directly benefit the next five years of development and what portion would benefit areas other than this projected development.
- Projections should be made of the revenues that would be generated by the projected development over the next five years, including revenues generated by expected new residential, commercial and industrial development. This information could be obtained through the cooperation of the County Assessor's Office.
- The projected revenues should then be compared with the costs of all the new services and facilities requested by the County and City departments and with the costs directly benefiting new development to determine the relationship between the costs and revenues associated with the development projections for the next five years.

The above methodology represents an important means to monitor the costs of service provision to new development and for evaluating the revenues derived to cover the costs for future service provision. This monitoring process will require the close cooperation of many departments throughout the County

and Cities of Red Bluff, Corning, and Tehama, but only in this way can Tehama County's Board of Supervisors and the City Councils make informed land use decisions that accommodate future growth in a cost-effective manner.

PROCEDURE FOR GENERAL PLAN AMENDMENTS

California law requires the Planning Department to "render an annual report to the legislative body on the status of the plan and progress in its implementation."¹ As mentioned, the annual review is important to review and revise the implementation program of the plan to reflect the availability of new implementation tools, changes in funding sources, and the results of monitoring the effectiveness of past decisions. If plan amendments appear necessary, the Board of Supervisors may amend the General Plan no more than three times in one calendar year.²

The results of the Planning Department's monitoring process will be reported to the Tehama County Planning Commission annually, with the Planning Commission functioning to initiate recommendations for Plan amendments to the Board of Supervisors.

In reviewing proposed amendments, the Board of Supervisors must remember that a general plan is a policy document for the entire County and amendments can only be made within the "public interest."³ As such, the amendment should not be reflective of an individual's or group's desire for the amendment. The plan should only be amended when a broad consensus of the community expresses its desire for the change. Every general plan amendment must be consistent with the rest of the general plan or appropriate changes will need to be made to maintain consistency.

All general plan amendments constitute a project under the California Environmental Quality Act and must be evaluated for potential environmental impacts. Also, as with all amendments, the County must follow the procedural course outlined in Government Code Sections 65350 et. seq..

Lastly, proposed general plan amendments should be referred for comment to other government agencies within Tehama County's overall planning framework. This should include at a minimum all agencies represented on the Interjurisdictional Steering Committee that participated in the General Plan Revision Program.

¹ Government Code, Section 65400(b).

² Government Code, Section 65361.

³ Government Code, Section 65356.1.

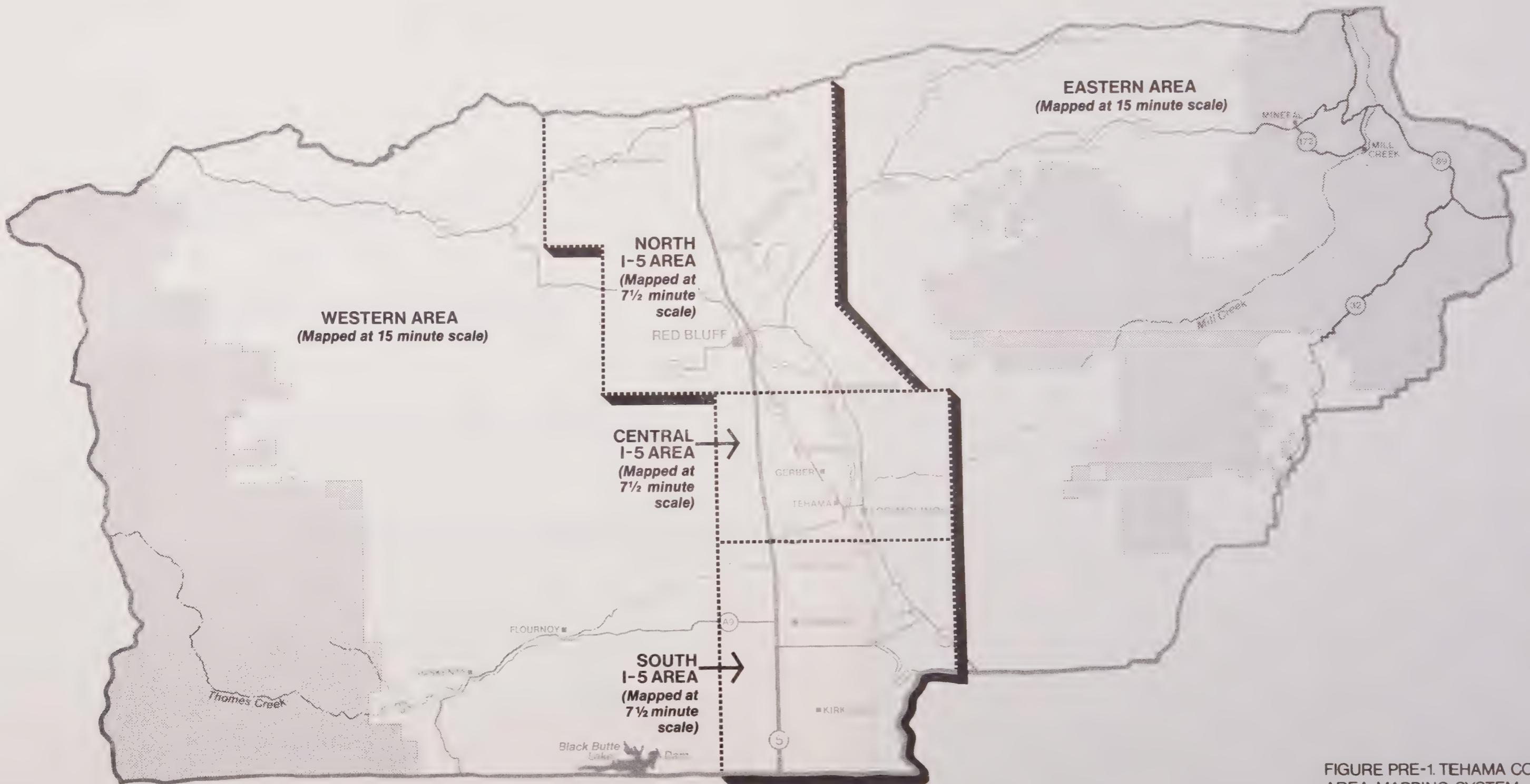


FIGURE PRE-1. TEHAMA COUNTY PLANNING AREA MAPPING SYSTEM



GENERAL PLAN REVISION PROGRAM
Tehama County, California

SEDWAY/COOKE
Urban and Environmental Planners and Designers

0 5 10 15 miles

640 Acres
(One Square Mile)

FIGURE PRE-2. TIME FRAME OF TEHAMA COUNTY GENERAL PLAN

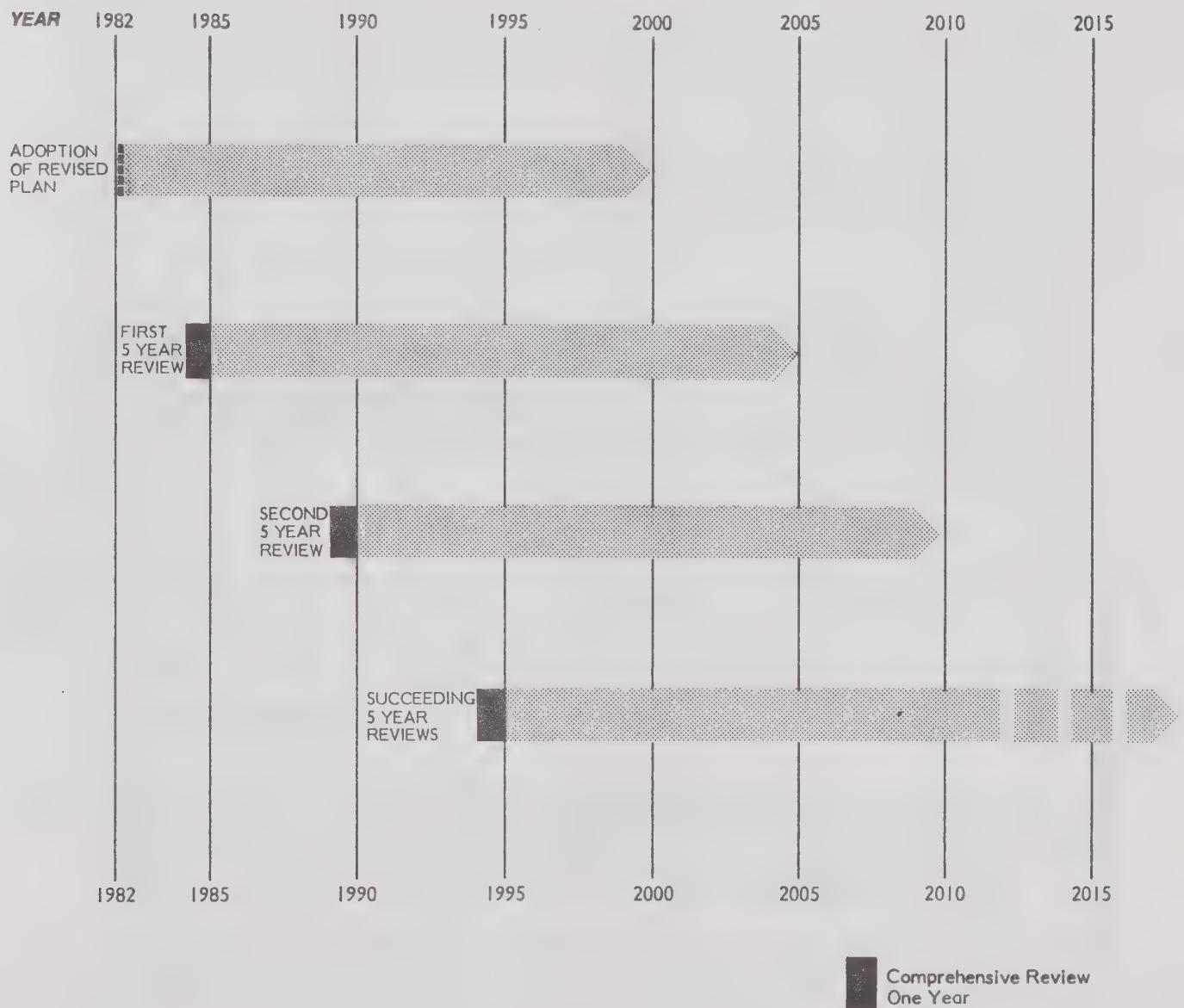


TABLE PRE-I: GENERAL PLAN DATA BASE MAPPING INVENTORY

Data Item	Map Inventory by Planning Area				
	North I-5	Central I-5	South I-5	Eastern Region	Western Region
Slope	AM 7 1/2	AM 7 1/2	AM 7 1/2	PM 15	PM 15
Agricultural Preserves	AM 7 1/2	AM 7 1/2	AM 7 1/2	AM 15	AM 15
Timber Preserves	AM 7 1/2	AM 7 1/2	AM 7 1/2	AM 15	AM 15
Minerals/Aggregates	AO 7 1/2	AO 7 1/2	AO 7 1/2	AO 15	AO 15
Flood Plains	AM 7 1/2	AM 7 1/2	AM 7 1/2	AOV	AOV
Environmentally Sensitive Areas	AM 7 1/2	AM 7 1/2	AM 7 1/2	*	*
Riparian Habitats	AO 7 1/2	AO 7 1/2	AO 7 1/2	AOV	AOV
Groundwater Basin	AM 7 1/2	AM 7 1/2	AM 7 1/2	AM 15	AM 15
Grazing Land	AO 7 1/2	AO 7 1/2	AO 7 1/2	AO 15	AO 15
Important Farmlands Inventory	AM 7 1/2	AM 7 1/2	AO 7 1/2	POV	POV
SCS Soil Class	AM 7 1/2	AM 7 1/2	AM 7 1/2	PO 15	PO 15
Public Landownership	AM 7 1/2	AM 7 1/2	AM 7 1/2	AM 15	AM 15
Water Service Boundaries	AM 7 1/2	AM 7 1/2	AM 7 1/2	NA	NA
Wastewater Service Boundaries	AOV	AOV	AOV	NA	NA
Wildfire Hazard	*	*	*	*	*
Soil Septic Suitability	AM 7 1/2	AM 7 1/2	AM 7 1/2	PO 15	PO 15
Dam Inundation Zones	AOV	AOV	AOV	AOV	AOV
Development Suitability	AO 7 1/2	AO 7 1/2	AO 7 1/2	AO 15	AO 15
Land Use	AM 7 1/2	AM 7 1/2	AM 7 1/2	PM 15	PM 15

Notes: A = Available
 NA = Not applicable
 M = Mylar overlay
 O = Other overlay

7 1/2 = 7 1/2 minute U.S.G.S. quadrangles, map scale, 1" = 2,000'
 15 = 15 minute U.S.G.S quadrangles, map scale, 1" = 1 mile
 V = Scale varies
 P = Partial mapping

* Mapped data non-overlay form

Conceptual Basis of the General Plan

This chapter contains two sections. The first presents the Plan's objectives which provide the basis for the elements of the General Plan. The second section provides an overview of the conceptual basis of the Plan describing the major concepts and ideas as they relate comprehensively to the objectives.

Objectives

The objectives of the General Plan are statements of community values regarding the future growth, development, and quality of life in Tehama County. The objectives provide the foundation for the overall concept of the General Plan which is described in this chapter.

The Plan's objectives were developed through the efforts of the Citizens of Tehama Advisory Committee (CTAC). A questionnaire and group discussion of planning issues were used to develop a preliminary statement of objectives which was reviewed by the citizens group and revised in response to comments. Inclusion of the objectives in the Plan and the adoption of the Plan by the Board of Supervisors should be recognized as a commitment to use the objectives as a guide for future growth and development in Tehama County. The Plan recognizes, however, that community values may change over time in response to events within and outside of Tehama County. Accordingly, the Plan provides a method for reviewing the applicability of community goals and related objectives. The availability of this opportunity for future revision of these objectives should not diminish the long-term commitment implicit in the Plan objectives.

The objectives which follow have been grouped according to the major element groups of the Plan. These groups are: Resources and Community Development.

RESOURCES GROUP

Agricultural Lands (AG)

AG-1

Preservation of lands of viable agricultural capabilities according to soil characteristics, with consideration given to access, water, location, and other relevant factors.

AG-2

Protection of lands currently being used for agriculture, but which have marginal agricultural capability characteristics, unless their need for non-agricultural uses is demonstrated.

AG-3

Protection of agricultural lands, whenever possible, from non-agricultural development through separation by natural buffers and land use transition areas that mitigate or prevent land use conflicts.

AG-4

Protection of agricultural lands from development pressures or uses which will adversely impact or hinder existing or foreseeable agricultural operations.

AG-5

Recognition that preservation of agricultural lands emphasizes community understanding and acceptance of the agricultural practices utilized by agriculturalists and ranchers.

Timber (T)

T-1

Preservation of prime timberlands.

T-2

Protection of prime timberlands from adjacent development which has the potential to adversely impact timber growing and harvesting operations.

T-3

County recognition of the various timber management improvement and education programs as a means to improve timber yields and protect wildlife habitat and watershed lands.

Water (W)

W-1

Protection and conservation of water resources and supply systems.

W-2

Protect surface water quality and streamflows for water supply, recreation, and aquatic ecosystem maintenance.

W-3

Encourage existing and new development to incorporate water conservation measure which decrease overall water use requirements, minimize runoff, and thereby maximize groundwater recharge.

W-4

Maintenance, to the extent feasible, of open space along the Sacramento Valley Groundwater Basin to assure continued recharge of groundwater resources.

W-5

Develop land use specifications for areas adjacent to the Cottonwood and Thomes-Newville water projects responsive to project impacts.

W-6

Unless overriding economic or social circumstances are evidenced, future residential subdivision development within existing irrigation districts should be discouraged to preserve their agricultural integrity, unless the agricultural use is no longer present.

W-7

Ensure the high quality of groundwater by emphasizing programs which minimize erosion and prevent the intrusion of municipal and agricultural wastes into water supplies.

W-8

Document of County-side basis septic tank performance to permit the collection of locational data concerning failures and water well contamination.

W-9

Experiment, on a limited basis, with alternative wastewater treatment systems to establish their economic and technological feasibility for use in areas having limited soil suitabilities.

Air (A)

A-1

Preserve and protect the existing air quality of the County.

Wildlife Resources (WR)

WR-1

Preserve environmentally sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance and character.

C0-3

Promote a development pattern which, whenever possible, maximizes the use of existing public roads prior to constructing new roads.

C0-4

Encourage compact development and discourage linear development patterns.

C0-5

Develop a land use pattern which, to the maximum extent feasible, minimizes the expenditure of public funds for road construction and maintenance.

C0-6

Promote a development pattern which will accommodate growth, consistent with other stated Objectives, the growth projected for the County during the planning period (1983-2000).

C0-7

Govern new development with subdivision, zoning, and other regulations that explicitly define government and private sector responsibilities and expectations with regard to an acceptable balance between public facility and service costs and public revenues derived from new growth.

C0-8

Accommodate growth in a manner that preserves the predominate rural lifestyle and unique qualities that make the County an attractive place to live and that recognizes that a rural lifestyle does not always necessitate the provision of the full complement of services normally found in urban communities.

C0-9

Broaden the employment opportunities for County residents by encouraging new industries which are appropriately scaled and located.

C0-10

Provision of a land use pattern which relates jobs to housing and vice-versa.

C0-11

Designate lands for industrial development which are appropriate for this purpose.

C0-12

Accommodate urban growth and other non-agricultural development by utilizing, whenever possible, lands which do not have agricultural viability.

C0-13

For those lands deemed appropriate for commercial and industrial uses, improve access to road, rail and air transportation in a cost-effective manner to facilitate their economic development.

CO-14

Allow opportunities for small scale businesses and industrial firms.

CO-15

Encourage development to locate adjacent to areas where fire protection services exist or can be efficiently provided.

Water Supply (WS)

WS-1

To the extent feasible, locate future development in areas where existing water districts have available resources to accommodate development, where existing districts may be expanded to serve new development in a cost-effective manner, where service districts providing new systems can be created on a cost-effective basis and in areas deemed suitable on the basis of appropriate field tests for on-site systems.

Wastewater Treatment (WT)

WT-1

Provide a level of wastewater treatment appropriately scaled to match a development's characteristics and site conditions.

WT-2

To the extent feasible, locate future development in areas where existing community wastewater treatment systems have unused capacity, where it is cost-effective to expand existing systems, where service districts providing new systems can be created on a cost-effective basis, and where on-site inspections and field tests have established the long-term, cost-effective feasibility of on-site systems.

Solid Waste Disposal (SW)

SW-1

Develop a solid waste program that equitably relates revenues to operating expenses for all County residents.

Schools, Libraries, and Recreation Facilities (SLR)

SLR-1

Development of a land use pattern which can be adequately served in a cost-effective manner with schools, libraries, and recreation facilities.

General Plan Implementation (GPI)

GPI-1

Develop a General Plan internally consistent with all other plan elements and which provides the policy basis for its implementation system.

GPI-2

Insure that the General Plan will be applied consistently and equitably to all development proposals.

GPI-3

Establish a planning process which can respond to changing conditions or community values, yet one which will not yield to short-term pressures exerted by narrow interest groups.

GPI-4

Establish a planning process which has the personnel and data resources to competently and objectively assess the singular and cumulative impacts of both day-to-day and long range planning matters.

GPI-5

Ensure a planning process accessible to all citizens of Tehama County and one which recognizes the continuing need for citizen review of the goals, objectives, policies and standards contained in the General Plan.

GPI-6

As part of the ongoing planning process, formulation and operation of an institutional framework which recognizes and complements current planning policies and management practices conducted by the Cities of Red Bluff, Corning and Tehama; special districts within the County; Federal (National Forest, National Park, Bureau of Land Management) and State agencies, and adjacent counties.

Description of Plan Concept

In order to respond to the objectives outlined above, the General Plan is based on four fundamental concepts:

- accommodating growth, but not limiting growth or accepting uncontrolled growth,
- locating major growth along the Interstate 5 transportation corridor,
- organizing growth according to a range of community types, and
- preserving agricultural land resources.

Since these concepts are major themes or ideas which are reflected throughout the Plan, the following discussion also provides a general summary of its content. These concepts are illustrated using several figures, which are referenced in the text. The order in which these concepts are discussed does not reflect their priority or importance.

ACCOMODATION OF GROWTH

As shown in Figure CPT-1, Population Trends, the General Plan examines two population projections for the years 1985, 1990, 1995, and 2000. The lower projection would result in a total opulation of 59,000 people by the year 2000 and the higher population would result in a total of 75,000 people by the year 2000.

To ensure that enough land is available to accommodate future population growth, the General Plan takes a conservative approach and utilizes the higher population projection for subsequent determination of future land demand. The higher population projection assumes an average annual growth rate of 4.5 percent over the next 20 years. This rate would result in an average annual increase of 1,780 persons and represents a continuation of the rapid growth experienced by the County during the past 5 years. The higher projection assumes an increasing rate of growth to the year 1990, with the rate slowing down from 1990 to 2000. Using the higher population projection, the General Plan provides an inventory of developable land sufficient to accommodate the housing and employment required by this level of growth.

The General Plan does not prevent more growth, nor is it intended to slow down or limit the rate of growth. Provided in the Plan are policies directing that the County's growth be monitored on an annual basis. At five year intervals, the amount of the developable land supply which has been absorbed during this period will be determined. Depending on the past rate of land absorption, additional lands will be added to the developable land inventory to ensure a supply adequate for yet another twenty years. Therefore, at any given point during these five year review periods, the developable land inventory will never fall below a fifteen year supply. If the County's rate of growth exceeds the higher projection shown in Figure CPT-1, the developable land supply can be adjusted at these five year intervals to reflect this increased demand for land.

In accommodating growth it is important that future development be sequenced in such a manner that community needs for housing, public services and public facilities be met adequately and in an orderly, convenient fashion. Aside from providing certainty in the land use regulatory process, this strategy of growth accommodation allows government to program the expenditure of public funds to provide the public services and facilities required by growth in the most cost-effective manner.

It follows from this strategy that growth accommodation does not mean the acceptance of growth in an uncontrolled, unplanned manner. The essence of accommodating growth is directing it to areas where it can be served on a cost-effective basis and where it will not consume or adversely affect County land resources essential to its economic base, such as agricultural lands.

LOCATING GROWTH ALONG THE I-5 CORRIDOR

The Plan's development pattern is based on the concept of accommodating the major portion of projected population growth within what is referred to as the "I-5 Corridor." This means that future population growth is located on suitable lands within the greater Sacramento River Valley along the transportation corridor provided by Interstate 5, the Southern Pacific Railroad, State Highway 99E, and County Road 99W. The rationale for this concept is threefold:

- the I-5 Corridor provides access to regional markets,
- future housing and the associated labor resources must be located in close proximity to sources of employment and major transportation linkages,

- the I-5 Corridor growth pattern is necessary in order to utilize existing and potential unused capacity of community water supply and wastewater treatment systems.

The following discussion addresses the above three rationale.

I-5 CORRIDOR PROVIDES ACCESS TO REGIONAL MARKETS. Tehama County's economy must be viewed in a regional context. As shown in Figure CPT-2, population, employment, and production centers have historically located within the Sacramento River Valley. Access to transportation is one important reason for the location of people and jobs within this area. Tehama's economic growth has and will continue to be dependent upon local industry's ability to produce, process, and transport goods to markets located throughout the western states region shown on Figure CPT-2 inset. Transportation is the movement of goods, services, and people, and access to the lowest cost transportation facilities is vital for Tehama County's continued economic growth.

LOCATING HOUSING OPPORTUNITIES IN PROXIMITY TO EMPLOYMENT OPPORTUNITIES AND TRANSPORTATION FACILITIES. The Plan designates residential lands in close proximity to existing and future employment opportunities in recognition of Tehama County's diversifying economy. Manufacturing -- particularly the durable goods sector -- services, and retail trade will play increasingly important roles in the County's economy. These economic activities require access to rail lines and major interchange points along major north-south highways. The rationale then is to place these economic activities in locations that afford access to transportation networks and locate future housing opportunities and associated labor resources close to jobs. Figures CPT-3, 4, and 5 present area policy diagrams for the North, Central, and South I-5 Planning Areas. These figures show the generalized growth pattern reflecting the conceptual basis of the Plan.

While accommodating future population near areas of employment, the Plan also recognizes the continued, significant contribution made by the agricultural and natural resources sector of the economic base. Accordingly, future employment is accommodated in a manner that retains the County's agricultural resources.

UTILIZATION OF EXISTING AND POTENTIAL CAPACITY OF WATER SUPPLY AND WASTEWATER SYSTEMS. The I-5 Corridor growth pattern accommodates future residential land use in a manner intended to utilize existing and potential capacity of water supply and wastewater systems. The Cities of Red Bluff and Corning currently have or are planning for additional wastewater treatment capacity. Utilizing this capacity while meeting the other Plan objectives is fundamental to the conceptual basis of the Plan.

ORGANIZING GROWTH FOR COMMUNITY VARIETY

The General Plan recognizes that existing and future residents of Tehama County will not all desire the same type of living environment. A range of community types, varied as to size, level of services, political organization, and geographic location, is therefore provided within the I-5 Corridor. These community types, which are shown in Figures CPT-3, 4,

and 5, range from Urban Center to Rural Community.

Each community type is addressed by policies designed to ensure the provision of an appropriate level of services and development at densities which will support the level of services provided. For example, development within or in close proximity to urban centers is not planned at lower densities characteristic of rural areas. These lower densities would make the provision of urban services extremely costly on a per unit basis. Their highly consumptive land use pattern would preempt later development at higher densities, thus forcing future growth to be accommodated at greater distances from urban centers. Conversely, development within rural communities is planned at low densities consistent with the service requirements and lifestyle expectations of their residents.

AGRICULTURAL PRESERVATION

Preservation of Tehama County's agricultural resources was identified as a key objective in the General Plan. Tehama County has been characterized as an agricultural county whose residents either are actively involved in agriculture or recognize the benefits of rural or nonurban living. This character is being threatened by pressures for development of agricultural lands into nonagricultural and urban types of uses.

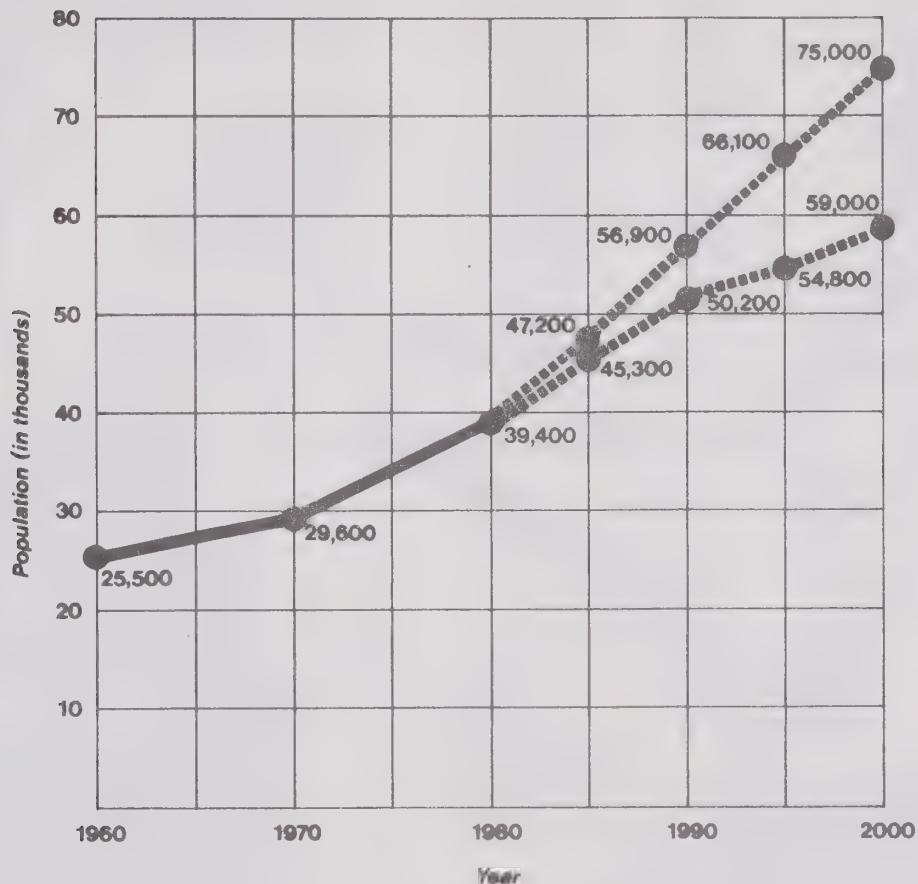
Agriculture has been and will continue to represent the major focus of the County's economic base. Approximately 1,800 persons, or one out of every nine County residents in the work force, is directly employed by the agricultural industry. Many more individuals earn their living by providing indirect or secondary service to the agricultural sector. To assure the continuation of this sector's contribution to the County's economic base requires that appropriate measures be taken to protect agricultural resources.

Inspection of Figures CPT-3, 4, and 5 reveals that the I-5 Corridor planning areas are part of one continuous valley of the Sacramento River. Not surprisingly, much of the lands within these planning areas have high agricultural capability. Inspection of these figures also shows that this valley is traversed by major transportation routes and is the location of urban and other non-agricultural development centers.

The basic concept of the General Plan is the resolution of the inherent conflict between agricultural and non-agricultural land uses. This is achieved by directing urban growth toward lands with relatively low agricultural capability, as shown by the "Growth Reserve" pattern of Figures CPT-3, 4, and 5, and by guiding all development, even at rural densities, to existing communities or developed areas. The Plan also contains other policies designed to prevent the piecemeal conversion of agricultural lands to other uses and to create a climate of public understanding in Tehama County which is supportive of agriculture.

The Plan recognizes that adherence to the concept of agricultural preservation will cause some disappointment of property owner expectations and dislocation of individual plans. However, this concept and its supporting policies reflect the high priority placed on agricultural preservation by County residents. Their willingness to implement these policies will provide an accurate indication of the depth of their commitment.

FIGURE CPT-1. POPULATION TRENDS



SOURCES: Population Research Unit, Department of Finance, 1960, 1970, 1980 (as of July 1 of each year).
Sedway/Cooke 1981.

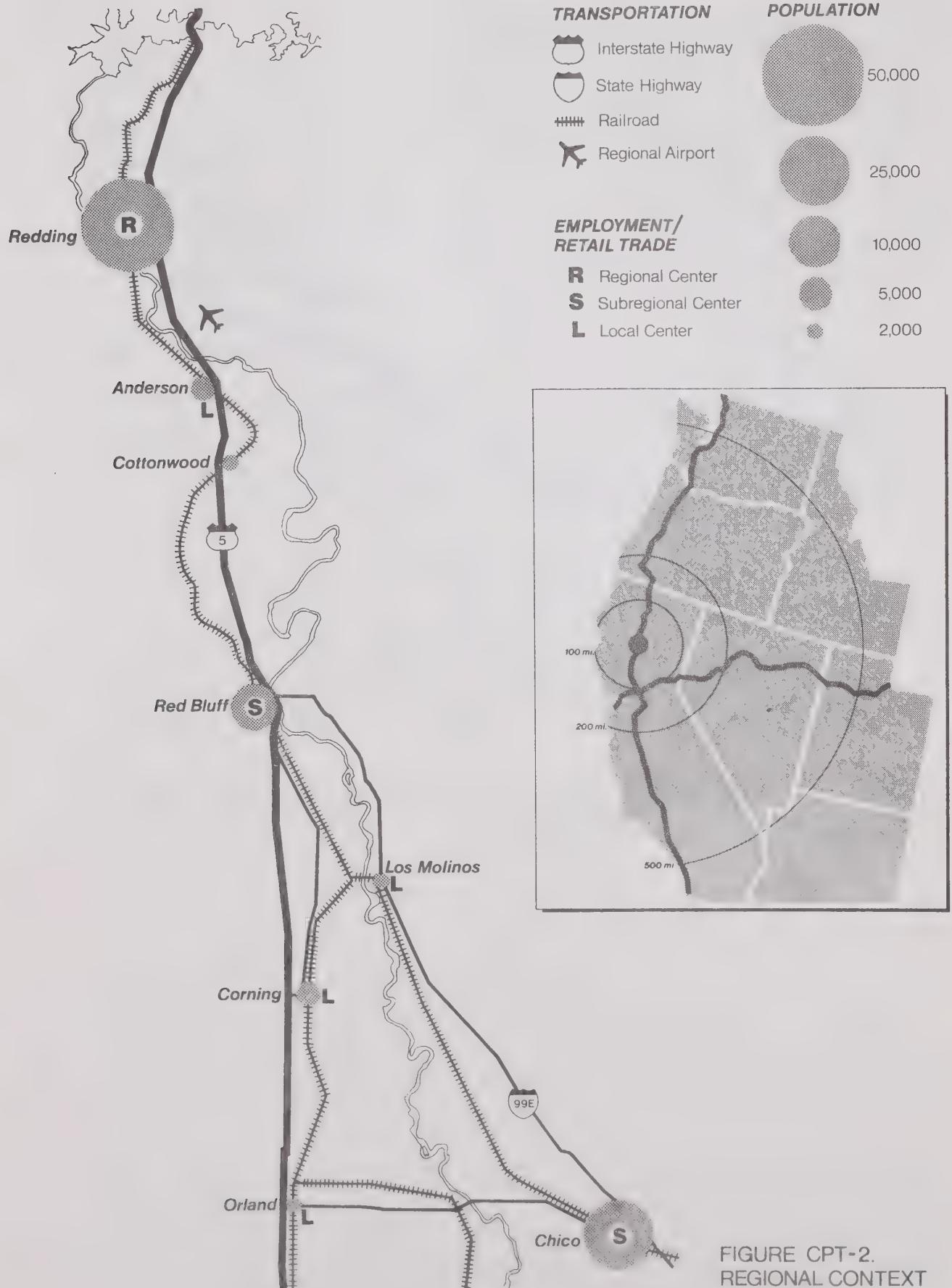


FIGURE CPT-2.
REGIONAL CONTEXT

FIGURE CPT-3. NORTH I-5
PLANNING AREA POLICY

Residential Area

Agricultural Land

Sacramento River Corridor

Urban Center

Interstate 5

Town Center

State Highway

Rural Service Center

Arterial

Rural Community



GENERAL PLAN REVISION PROGRAM

Tehama County, California

This policy diagram is intended to provide summary information only. The reader should consult the detailed land use maps available at the Tehama County Planning Department.

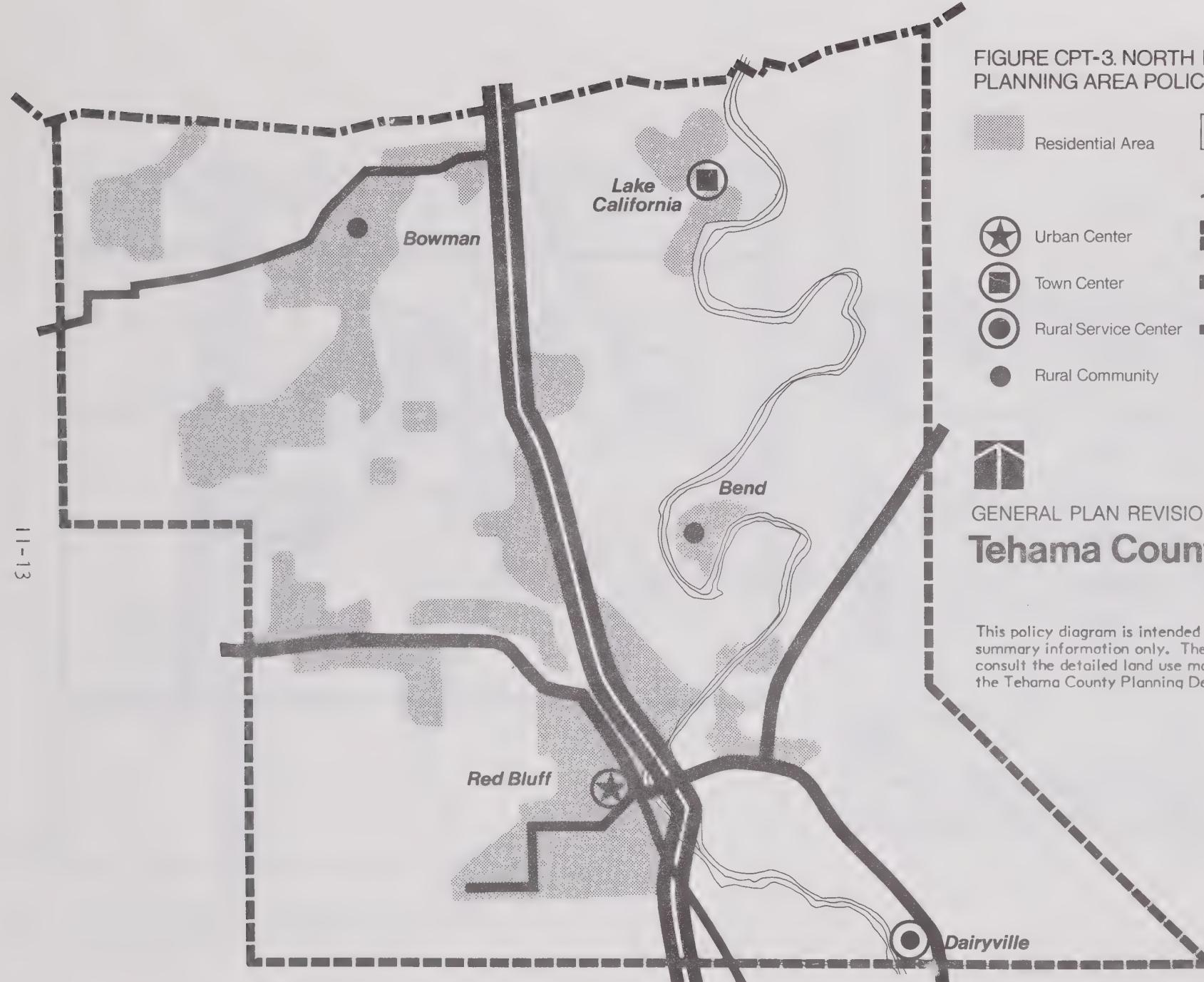
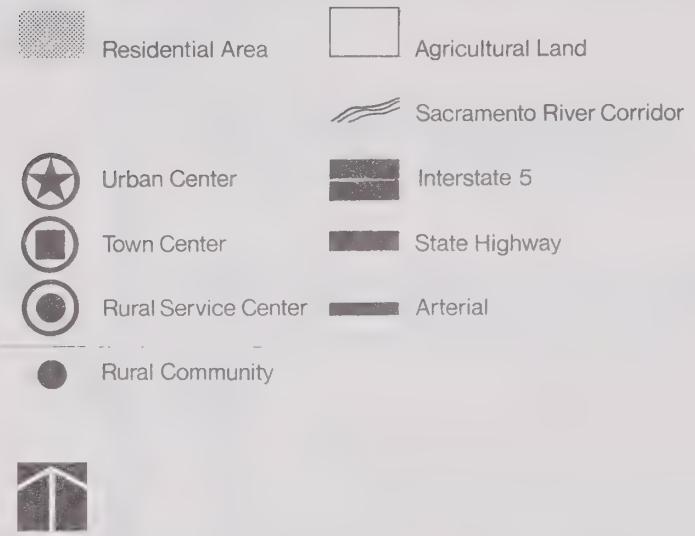




FIGURE CPT-4. CENTRAL I-5 PLANNING AREA POLICY



GENERAL PLAN REVISION PROGRAM
Tehama County, California

This policy diagram is intended to provide summary information only. The reader should consult the detailed land use maps available at the Tehama County Planning Department.

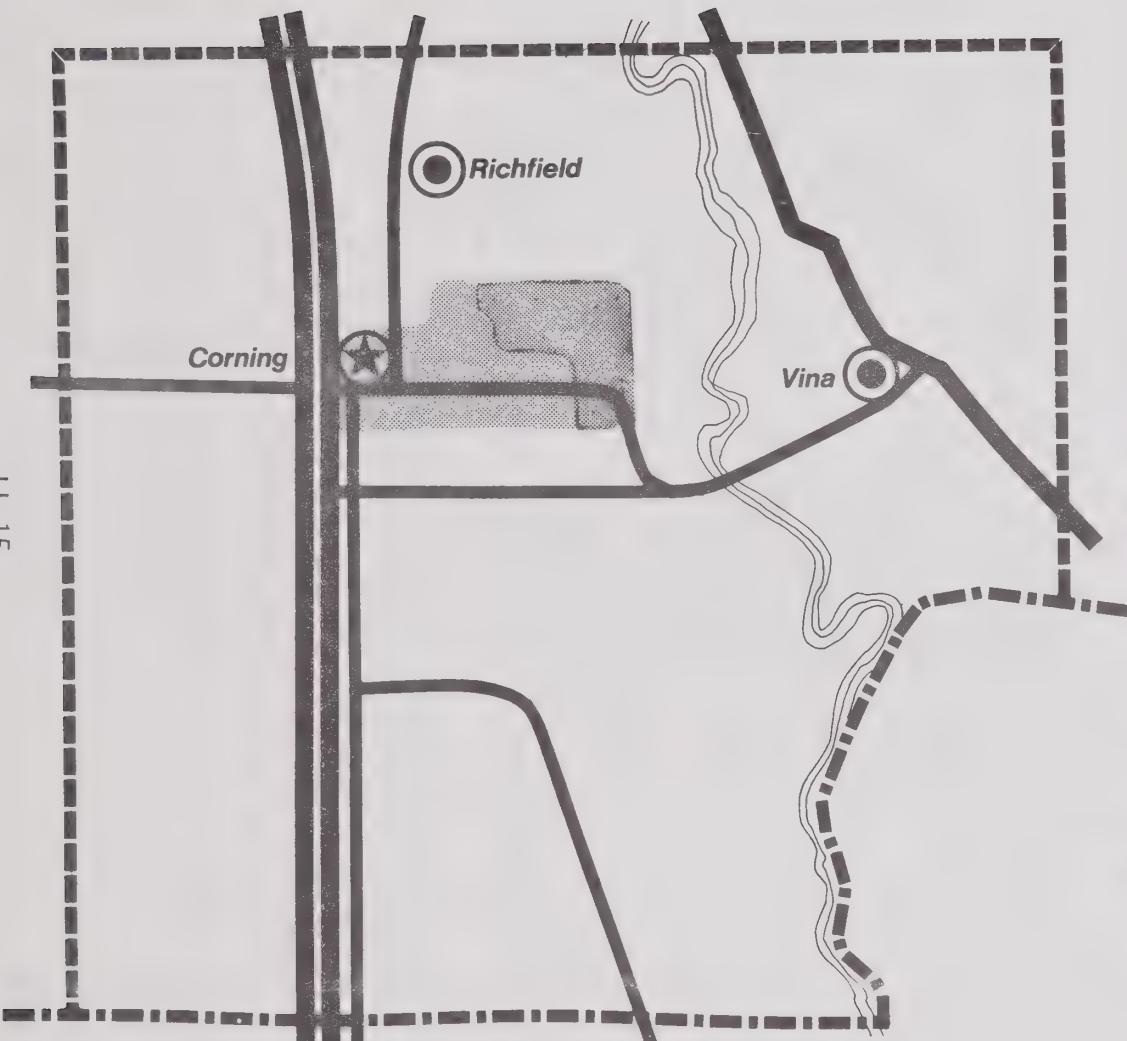


FIGURE CPT-5. SOUTH I-5 PLANNING AREA POLICY

Residential Area	Agricultural Land
Sacramento River Corridor	
Urban Center	Interstate 5
Town Center	State Highway
Rural Service Center	Arterial
Rural Community	



GENERAL PLAN REVISION PROGRAM

Tehama County, California

This policy diagram is intended to provide summary information only. The reader should consult the detailed land use maps available at the Tehama County Planning Department.

Element Groups

The elements of the Tehama County General Plan have been organized and consolidated into three element groups which will be presented in the following order: Public Safety, Resources, and Community Development. The purpose of this consolidation is to organize related plan elements. Within each element group its constituent elements will be addressed separately but will cover a variety of topics as they relate to other pertinent areas of the Plan. By way of example, water supply and quality is addressed as a constituent element of the Resources Group of elements, but it discusses the implications of the Plan's development pattern as it relates to water supply, water resources and natural habitat. The scope of the 1981-82 General Plan Revision work program required the preparation of draft Land Use, Circulation, Open Space, Conservation, and Public Facilities elements. The subject areas addressed by these elements are included within the Resources and Community Development Element Groups. The former also incorporates by reference the existing Scenic Highways Element, while the latter incorporates the Housing Element. The Public Safety Element Group incorporates by reference the existing Safety, Noise, and Seismic Safety Elements. Each element contains the following:

- **Introduction.** The introduction will state the need for the element, the authority to do it, and a brief description of its scope.
- **Findings.** The findings includes a description of existing conditions, problems, needs and opportunities. This discussion will refer the reader to the technical appendices for more detailed information.
- **Objectives.** The objectives contained in the Conceptual Basis chapter of the Plan which are relevant to the element will be repeated.

- Policies. Policies will be presented to address the objectives contained in the element. Policies may be listed in two levels of detail - general and specific. Specific policies will contain criteria and standards which will ultimately find their regulatory expression in the zoning ordinance and related land use ordinances.
- Policy Maps. Policy maps summarize those policies with geographic application. These maps may be supplemented by conceptual diagrams which respond to special or highly localized conditions.
- Implementation. A means to implement or carry out the policies listed in the element will be presented. Where appropriate, recommendations for modifying the existing General Plan Elements (Safety and Seismic Safety, Noise, and Scenic Highways) will be presented in order to insure consistency and integration with the Revised General Plan Elements.
- Environmental Impacts. The Plan Elements will consider the environmental effects of the objectives, policies, and implementation programs. Effects will be classified as either significant or not significant. The discussion of significant effects will indicate any unavoidable effects and mitigation measures proposed to minimize significant effects. Effects found not to be significant will be briefly discussed to indicate the basis of this determination. You will note that Part IV of the Plan is exclusively devoted to environmental impact assessment. This chapter will contain cross references to those sections of the plan and its appendices which satisfy CEQA requirements for an EIR. It will also contain a procedure for using the Plan EIR to satisfy the CEQA requirements of future land development projects. The intent here is that projects conforming with the Plan would require either a negative declaration or a limited EIR which focuses only on site specific impacts.

Public Safety Group

INTRODUCTION

The Seismic Safety, Noise, Scenic Highways, and Safety Elements of Tehama County stand as separately bound documents. In order to satisfy California State Planning Law, this General Plan document incorporates these elements by reference and presents below general recommendations for the revision of these elements to insure an internally consistent and integrated General Plan.

GENERAL PLAN CONSISTENCY WITH THE EXISTING SEISMIC SAFETY ELEMENT. The Revised General Plan Elements are consistent with the existing Seismic Safety Element. Technical Report #3, Development Suitability Analysis, of the General Plan's Technical Appendix identified Tehama County lands suitable for accommodating future population and development. This analysis incorporates information contained in the existing Seismic Safety Element.

GENERAL PLAN CONSISTENCY WITH THE EXISTING NOISE ELEMENT. The population growth projected to occur during the 1982-2000 planning period will contribute significantly to future traffic volume and associated noise impacts. Revisions to the existing Noise Element will be necessary in order to assess the site-specific impacts of future noise to existing noise sensitive land uses. Noise sensitive land uses include hospitals, rest homes and resident care facilities, recreation and retreat areas, residential areas, and sites of existing educational facilities.

GENERAL PLAN CONSISTENCY WITH THE EXISTING SAFETY ELEMENT. Technical Report #3, Development Suitability Analysis, of the General Plan's Technical Appendix, incorporates information on natural and man-made hazards in Tehama County. The General Plan's development pattern accommodates growth on lands based upon the absence of hazards, thereby maintaining consistency with the existing Safety Element.

Resources Group

The Resources Group of the Revised General Plan consists of the 10 elements listed below:

- Agriculture
- Timberlands
- Water and Water Quality
- Air Quality
- Wildlife Resources
- Minerals
- Natural Resource Lands and Recreation
- Scenic Highways
- Historic and Archaeological Resources

As a group, these elements address the impacts of future growth and development on the natural resource base of Tehama County. Natural resources are essential for growth. Without ample supplies of quality water, economic opportunities via agriculture and timbering, or wildlife resources which provide scenic amenities and enhance the quality of life, the development of Tehama County would not occur. Yet while resources are essential for growth, they must suffer the impacts which growth inevitably causes. For this reason, the revised General Plan strikes a balance between resource utilization and preservation in order to allow growth while simultaneously protecting the environment which supports it.

AGRICULTURAL LANDS

INTRODUCTION. The preservation of agriculture was identified by the Citizens of Tehama Advisory Committee (CTAC) as the priority issue to be addressed by the General Plan. Agricultural preservation has two aspects. In its conventional sense, agricultural preservation is concerned with protection of the land resources necessary for agriculture. Recently, increasing attention is being focused on the activities by which land is used for agricultural purposes. While traditionally local governments have focused on the former aspect of agricultural preservation, it is becoming apparent that local government also has a role to play with respect to agricultural activities. Both aspects of agricultural preservation are addressed by this element.

Agriculture, as defined in this element, is the use of lands and accompanying activities for the production of crops and livestock. Following this definition, this element recognizes two types of agricultural land - croplands, which includes irrigated pasture, and grazing lands.

This element encompasses portions of three mandatory general plan elements - Land Use, Conservation, and Open Space. The pertinent portions of these elements are quoated below:

A land use element...designates the proposed general distribution and general location and extent of the use of land for...agriculture...(Government Code Section 65302(a).)

A conservation element for the conservation, development, and utilization of natural resources including...soils...(Government Code Section 65302(d).)

Open space for the managed production of resources, including... rangeland, agricultural lands, and areas of economic importance for the production of food or fiber...(Government Code Section 65560(b)(2).)

FINDINGS. Priority Issue. As noted in the Introduction, agricultural preservation was identified by the CTAC as the planning issue with highest priority for attention by the General Plan. Preservation of agriculture in turn raises many other issues whose resolution is difficult and not likely to receive the unanimous support of all County residents. The major question is whether Tehama County, having identified agricultural preservation as its highest priority issue, is willing to commit itself genuinely and wholeheartedly to the steps necessary to achieve this objective.

Contribution to County. Agriculture preservation is a high priority issue because of both its economic and non-economic contributions to Tehama County. A diversified, multi-million dollar industry, agriculture contributed \$89,369,700 (cost value) in 1980 to the County's economy.¹ It is estimated that approximately 12% of the County's work force is

¹ Agricultural Commissioner, 1980 Tehama County Agricultural Crop Report.

directly employed by agriculture.¹ Beyond direct employment, agriculture provides employment for many more persons engaged in providing goods and services to those directly working in agriculture.

Beyond its economic importance, agriculture contributes to Tehama County in many other ways. Because agriculture is the dominant land use in the County, it is responsible for providing the rural lifestyle enjoyed by many County residents who are not engaged in agriculture. In addition to these social aspects, agriculture contributes directly to the physical environment.

Croplands and grazing lands are major open space resources. As compared with development of these lands, they contribute to the maintenance of air and water quality and the preservation of wildlife habitat. Looking toward the future, increasing transportation energy costs will result in increased prices of food supplies. While it is hoped that local self-sufficiency in food production will never become a necessity, the agriculture industry of Tehama County does provide that option.

In the final analysis, however, the rationale for agricultural preservation is an economic one. Were this industry to decline or disappear due to loss of its resource base to nonagricultural uses, the discouragement of future agriculturalists by an unsympathetic climate of local opinion or other reasons, the resulting economic dislocations would be experienced by all County residents. It is primarily for this reason that agricultural preservation has received the highest priority.

Pattern of County Agriculture. In order to formulate an appropriate policy for agricultural preservation, it is necessary to understand the pattern of agriculture in Tehama County. This pattern may be described by examination of the following factors:

- agricultural lands and their classification,
- agricultural commodities,
- characteristics of agricultural units and operators, and
- future trends.

Agricultural Lands and Their Classification. The threshold issue in any agricultural preservation policy is the identification and relative classification of agricultural lands. In order to ensure local credibility and legal defensibility, the protection afforded agricultural lands must have a basis in fact and the degree of protection must reflect the relative value of the lands. The following discussion considers the various classification systems in use in Tehama County and how they were used to identify agricultural lands designated by the General Plan. Much of the following discussion of the types of classification is taken from Reganold and Singer, Defining Prime Agricultural Land in California, 1978. Paragraphs marked with an asterisk (*) are taken from this source.

The USDA Land Capability Classification System is the best known and most widely used land capability classification system. It is an interpretive

¹ Sedway/Cooke, Preliminary Technical Report #2, Population, Employment, and Housing Projections, p. 10.

classification system for agricultural purposes which uses soil and climatic data to place delineated soil areas into groups of approximately similar management options or problems. Three levels of groupings are used of which the broadest level is the capability class. Soils are placed in Classes I through VIII depending on limitations and risks of soil damage. The second level is the subclass which groups soils within a capability class on the basis of kind of limitations and hazards. The four subclasses used are e-erosion hazard, w-wetness, s-rooting zone limitations, and c-climatic conditions. The third level, the capability unit, is the most detailed grouping. It contains soils that have about the same response to management practices of common cultivated plants.

The USDA Capability Classification System is the one most familiar to County residents in their discussions of agricultural lands. In these discussions, Class I and II soils are usually referred to as "prime agricultural lands." These classifications were mapped for three 1-5 planning areas of the County on USGS base maps at the 7-½ minute scale. These maps are on file with the Planning Department. In terms of their application to County lands, Class I and II lands are generally located along the alluvial plains of the Sacramento River and its tributaries flowing into it from the west. Recognizing the limitations of the Land Capability Classification system, the USDA recently developed another system for assessing and classifying agricultural lands.

The primary intention of the USDA in developing the Prime and Unique Farmland Definition and the Land Inventory and Monitoring (LIM) system is to inventory and evaluate the nation's best farmlands, whereas their primary goal with the Land Capability Classification system was to group lands according to recommended conservation practices. The specific criteria for designating prime agricultural lands according to the LIM system are that prime farmland has (a) an adequate moisture supply, (b) a warm enough temperature regime and long enough growing season for crops adapted to the area, (c) a pH between 4.5 and 8.4 in the root zone, (d) a water table that is maintained at a sufficient depth during the cropping season to allow for crop growth, (e) an exchangeable sodium percentage of less than 15 and a conductivity of a saturation extract of less than 4 mmho/cm within the rooting zone, (f) flooding not more than once in 2 years, (g) a product of K (a soil erodibility factor) times percent slope of less than 2.0, (h) a permeability of at least 0.15 cm/hr in the top 50 cm, and (l) a surface layer with less than 10% rock fragments coarser than 7.6 cm in the longest dimension. The above nine criteria form a national LIM definition of prime farmland. In California, the Soil Conservation Service has added a tenth criterion in order to limit the "prime" classification to deep soils. This tenth criterion states that the soil must have a minimum rooting depth of 40 inches. Because the LIM criteria are somewhat different than those of the Land Capability Classification, in California the LIM criteria include within the prime land definition all of irrigated Class I soils, almost all irrigated Class II soils, about 30-35% of irrigated Class III soils, and perhaps 1% of irrigated Class IV soils.*

The LIM system further defines (1) unique farmland, (2) additional farmland of statewide importance, and (3) additional farmland of local importance. Unique farmland is land other than prime farmland that is used

for the production of specific high-value food and fiber crops. Examples of such crops in California are artichokes, avocados, dates, melons, and several other fruits and vegetables.*

"Additional farmland of statewide importance," in addition to prime and unique farmlands, is land of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. An example of this land would be rice, barley, cotton, or alfalfa grown on non-prime or non-unique lands. Criteria for defining and delineating this land are to be determined by the appropriate state agencies.*

Last, "additional farmland of local importance" covers those local farmland areas that are of concern to cities or counties for the cultivation of crops, excluding lands that are prime, unique, or of statewide importance. These lands are to be identified by the local agency or agencies concerned. This category was included to allow flexibility in determining which areas should be preserved on a local level.*

The Corning Office of the U.S. Soil Conservation Service has recently completed mapping the farmlands of Tehama County using the LIM system. These maps, which use SCS base maps at a scale of 1:31,680 (2" = 1 mile), identify the important farmlands of Tehama County and classify them using the five categories shown on Table AG-1.

During the data collection phase of the General Plan revision program, SCS furnished maps showing important farmlands classified as Prime or State Important. These lands were mapped for the three 1-5 planning areas at the 7-½ minute scale (1" = 2,000'). Very generally, these lands are located along Cottonwood Creek and in a band extending from the south-east of Red Bluff to Corning and bounded on the east and west sides by the Sacramento River and Interstate 5.

Storie (1932, 1964) published a system of rating land according to its quality which was determined on the basis of productivity data from a number of major soils in California in the 1920s and 30s. Unlike the USDA Capability Classification of LIM systems, the Storie Index Rating (SIR) is a quantitative system which rates four soil factors on the basis of 0-100 points.*

The Storie Index was not used in the General Plan revision program to identify agricultural lands. It is noted in passing for the sake of completeness and because it is used in the classification of agricultural lands by the California Land Conservation Act (CLCA), discussed below.

All but one (USDA-LIM) of the previous methods of classifying land have avoided defining what is "prime" agricultural land. In part, this may be because such a determination is based on a policy definition rather than a technical definition. Most California legislative definitions rely on the preceding classification methods to specify what is prime agricultural land.*

The California Land Conservation Act (CLCA) or Williamson Act of 1965 defines prime agricultural land as a combination of soil properties and/or economic considerations. To qualify as prime land, the parcel

must be one of the following: USDA Class I or II, Storie Index 80 to 100, land that returned an annual gross value of not less than \$200 per acre for three of the past five years, livestock supporting land with a carrying capacity of at least one animal unit per acre, or land planted with fruit or nut trees, vines, bushes or crops that have a nonbearing period of less than five years and that will normally return \$200 per acre per year during the commercial bearing period. The broad definition was made on the basis that many of California's specialty crops are not grown on Class I and II lands.*

Lands under Williamson Act contracts in Tehama County were mapped for all five planning areas at the 7-½ minute scale (1" = 2,000') for the three I-5 planning areas and at the 15 minute scale 1" = 1 mile) for the Eastern and Western planning areas. These maps are on file with the Planning Department.

In the North I-5 planning area, contract lands are located along Cottonwood Creek and the Sacramento River. Significant amounts of land are located to the west and northwest of Red Bluff. Approximately one-half of the Central I-5 planning area is under contract. Large blocks of contract lands are located to the west of Interstate 5, in the area between the Southern Pacific Railroad and the Sacramento River in the vicinities of Proberta, Gerber, and Tehama, and to the east of 99 East in the upland areas. In the South I-5 area there is no dominant pattern, except that a large block of Williamson contract land is located to the east of Kirkwood. Very large areas under Williamson Act contracts are located in the Eastern and Western planning areas, generally in the upland and foothill areas between the valley and the mountains.

The final sources consulted for the identification and classification of agricultural lands were various local experts, including the Farm Advisor, Agricultural Commissioner, and local ranchers, orchardsmen, farmers, etc. In general, lands identified in this manner overlapped lands classified by the Important Farmlands Study as U, L, or LP (see Table AG-1). Lands identified by these local experts are identified on maps on file with the Planning Department.

The various sources described above and their accompanying maps were overlaid to form composite maps of agricultural lands. Lands used for the production of crops, including irrigated pasture, and classified as either Classes I and II, Important Farmlands, or under Williamson Act contract are designated by the General Plan as "Croplands." Lands classified as grazing by local experts or Williamson Act contract lands used for grazing are designated by the General Plan as "Grazing Lands."

Overall, in 1980, 1,097,256 acres of County lands were devoted to agricultural production.¹ This represents 80% of the total privately owned land area of the County or 58% of the total land area of the County. Of the 381,696 acres of land not currently in agricultural use, 241,700 acres are in Timber Preserve Zoning and 15,226 acres are developed, leaving a total of 39,942 acres of undeveloped land which theoretically could be developed to accommodate housing and employment growth without consuming

¹ Agricultural Commissioner, 1980 Annual Crop Report

any lands now devoted to agriculture. It is estimated that approximately 10,600 acres of land will be required to accommodate the growth projected for the next 20 years. Of course, not all of the 39,942 acres of potentially developable land could be used to accommodate growth and some lands currently devoted to agriculture should be used for growth accommodation due to their proximity to urban areas. The essential point is that through careful planning growth can be generally accommodated on nonagricultural lands, thereby protecting this industry and its economic contributions to the County. In the absence of careful planning, the land resources of agriculture are threatened by many factors. These factors are described below, following discussion of agricultural commodities, characteristics of agricultural units and operators, and future agricultural trends.

Agricultural Commodity. The present pattern of agriculture in Tehama County is dominated by fruit and nut crops, as shown in Table AG-2. Prunes and walnuts are the most important tree crops, each accounting for one-third of the value of the 1980 production of \$33 million. Fruit and nut crops are most heavily concentrated along the Sacramento River, especially the east bank, from the Butte County line north to Red Bluff. In terms of land area, fruit and tree crops account for 33,701 acres or 2.4% of the total County privately-owned land area.

Following fruit and nut crops in order of importance is the livestock industry, which in 1980 accounted for \$22,518,000 in value. In terms of land area, this segment of the agriculture industry is the greatest consumer of the County's land resources. According to the 1980 crop report, over 1 million acres of land or approximately 75% of the privately owned land in the County is devoted to pasture and range. Geographically, lands devoted to livestock production are located in the foothills areas of the eastern, western, and northern parts of the County. Some irrigated pasture areas are located in the valley area.

The balance of agricultural production in Tehama County is accounted for by field, seed, and vegetable crops, nursery, apiary, and livestock and poultry products. These uses are generally located in the Sacramento Valley area of the County on irrigated lands. Dryland farming occurs on the gently sloping foothills and terraces of the western part of the County.

Each of the agricultural commodities described above has different requirements in terms of the area of land required for its production. Also known as an economically viable unit or minimum parcel size, this concept also requires consideration of the characteristics of persons engaged in agriculture in Tehama County. These characteristics are described below.

Characteristics of Agricultural Units and Operators. Data from the 1978 Tehama County Census of Agriculture, the most recent year available, provides some insights into the characteristics of persons engaged in agriculture. In this year the average farm size was 909 acres, compared with the statewide average of 407 acres. As shown in Table AG-3, in 1978 42% of all County farms are between 10 and 49 acres in size.

Table AG-4 indicates that approximately one-third of all Tehama County farms had 1978 sales of less than \$2,500.

Of the 1,282 farms in the County, 1,269 or 99% were owned by individuals, families, partnerships, or family-held corporations. It is interesting to note that 55% of the 1,282 farm operators reported a principal occupation other than farming, and 52% of all farm operators reported working 100 days or more off the farm.

Future Agricultural Trends. Any assessment of future trends in agriculture requires some understanding of the past. Examination of Table AG-2 indicates that 1973 was a watershed year in County agriculture. In this year the value of fruit and nut crops for the first time exceeded that of livestock and poultry, marking the ascendancy of this segment of the agricultural industry. This shift was evidenced by an increase in acres of land devoted to fruit and nut crop from 29,512 acres in 1971 to 32,619 acres in 1973.

Another important change in recent years is the dramatic increase in acreage devoted to field crops, from 29,045 in 1973 to 45,760 in 1980. The most significant factor in this growth was the dramatic increase in dry land wheat farming, which in 1973 was less than 7,000 acres and grew to 22,000 acres in 1980. Preliminary figures for 1981 indicate that harvested acreage was 32,000 acres.¹

During this same period there were significant changes in other aspects of the agriculture industry. The number of head of feeders, steers, heifers, and calves declined to 23,700 in 1980. Concurrent with this decrease, the number of acres of irrigated pasture and range went from 38,400 and 982,000 acres, respectively, in 1970 to 34,100 and 960,000 in 1980. A sharp drop occurred between 1971 and 1972, when irrigated pasture decreased by 3,400 acres and range decreased by 13,000 acres.

No definitive studies have been made of the relationship between growth in the acres of land devoted to fruit, nut, and field crops and the decline in acres of land devoted to pasture and range. It is likely that most lands taken out of grazing have been converted to crop production. Specifically, irrigated pasture has been converted to orchards and range land to dry land farming. Economics is the major factor explaining these conversions; cropland brings higher return than grazing land. An indication of the magnitude of this differential is provided by Table AG-5, which compares average values of different types of agricultural lands in the Sacramento Valley.

The future of agriculture in Tehama County will continue to experience more of an emphasis on orchards and field crops relative to grazing. Acres of land under cropping will likely increase as more lands to the west of Interstate 5 are converted from grazing. Technological advances in arid irrigation will in part be responsible for this trend by allowing the introduction of orchards, especially prunes and almonds, on lands previously considered unsuited for these uses. Rice cropping is expected to increase as its production becomes better understood throughout the agricultural community. Recent experimental plantings of cotton in the County show that it does well on poor soils and requires less water and fertilizer to grow than other field crops, such as corn.

¹Agricultural Commissioner, telephone conversation of March 2, 1982.

Until its agricultural land prices equalize at some future time with prices in other areas statewide, Tehama County will remain attractive to immigrant farmers who are able to sell their lands elsewhere and purchase more land per dollar locally. Frequently these "newcomers" bring new technologies, new crops, and new approaches to agriculture with them.

The cattle industry, once the dominant sector of the agricultural economy of the County, will remain vital, but will continue to reflect problems facing all cattlemen nationally. Problems facing this industry include reduced consumer demand, high interest rates, and much stiffer competition from other meat sources.¹ While Tehama County will continue its traditional identification with the cattle industry, it is expected that more cattlemen will diversify and convert some of their lands to cropping.

Summary. Agriculture is the dominant land use in Tehama County, accounting for 58% of the total land area of the County. The higher value agricultural lands are located in the Sacramento Valley region of the County and are used primarily for fruit, tree, and field crops. Lesser value agricultural lands are located in the upland areas of the County and are generally used for grazing. Agriculture in Tehama County is primarily a family owned and operated industry. The holdings of individual farm units tend to be large, averaging about 900 acres, but there is a significant number of small units held by persons whose principal occupation is not agriculture. The economic outlook for the agricultural industry is bright, although the cattle industry will continue to face difficult times for at least the foreseeable future.

The potential for change in the pattern of Tehama County agriculture, as described above, is high. If present conditions are permitted to continue, several factors are likely to act over time to adversely affect both the agricultural land resources of the County and the activities of individuals engaged in agriculture. These factors are described below.

FACTORS AFFECTING FUTURE PATTERN OF AGRICULTURE IN TEHAMA COUNTY. The following discussion briefly considers factors which, if allowed to continue, will adversely affect the future pattern of agriculture in Tehama County. This discussion is followed by a planning strategy for eliminating or mitigating the impacts of these factors.

Conversion of Agricultural Land to Urban Land. This issue concerns the reduction in the total number of acres of land used for agriculture because of its conversion to an urban use. This occurs most frequently on the best agricultural land because that is where urban areas are located and where development is easiest. This issue is very sensitive to the growth and annexation policies of Red Bluff and Corning.

Problems at the Agricultural/Urban Fringe. There are two basic problems in the area where an urban area transitions into an agricultural area. The first is the impact urbanization has on the agricultural operations. The second problem is the impact agricultural operations have on the urban area.

¹ Security Pacific Bank, California Agriculture, 198, p. 18.

Urbanization has its primary impacts on adjacent agricultural operations in the forms of increases in assessed values of agricultural lands and increases in the prices individuals are willing to pay for such lands. Both impacts reflect the expectation that the use of these lands for agriculture is not a long-term prospect. Adjacent urbanization also affects agriculture through various forms of trespass, vandalism, and theft, including destruction of fences, crops, and stock, increased potential for wildfires, and loss of equipment. Traffic generated by urbanization can make the movement of farm equipment and livestock difficult. Finally, urbanization may take place on lands served by irrigation districts, making access to pipelines for maintenance difficult and, more importantly, decreasing district revenues through lowered water consumption.

Conversely, agricultural operations adversely affect the residents of urban areas through odors and flies, noise, use of pesticides, dust generated by land tilling, smoke from controlled burning of brush, and problems caused by straying livestock. These effects invariably cause the residents of urban areas to bring political pressure on their elected officials to curtail agricultural operations to protect urban areas from these impacts.

Scattered Pockets of Development in Agricultural Areas. Residential subdivisions and other developments have been approved in certain areas where the development is completely surrounded by agricultural operations. Typical examples of this problem are Rancho Tehama, a very large recreational subdivision surrounded by grazing lands under Williamson Act contracts and certain smaller subdivisions in the Antelope Valley area east of Red Bluff. This presents a form of the agricultural/urban fringe problem discussed above but is worse because a much larger perimeter area is subject to conflicts than would be if the boundary of an existing urban area were to expand. Also traffic must go through agricultural areas to reach the urban-type use. The impacts of future scattered pockets are the same as with existing pockets but the strategy to deal with the problems will be different.

Paper Subdivisions. Paper subdivisions, or subdivisions that exist only on a map, are of two types. One type is where the lots are in one ownership. This type presents relatively fewer problems. The other type is where the lots are in separate ownership although no development has taken place. One problem is that the potential for development is present, at least in the minds of the landowners. A second problem is that the land is in a type of legal limbo. Several of all of the parcels may be farmed by the same operator, but there is no incentive to use good agricultural practices or to make long term capital investments because of uncertainties.

Paper subdivisions are located throughout many of the agricultural areas of the County, especially in the Sacramento Valley region which contains some of the best agricultural lands. Some of these subdivisions date back to the turn of the century and are the result of early real estate promotions, the most notable of which is the Maywood Colony.

Parcel Size Too Small for Viable Agriculture. This factor is closely

related to the factors of scattered houses in agricultural areas and paper subdivisions. By whatever process, agricultural lands are over time divided into smaller and smaller parcels until they reach a point where the use of an individual parcel for agriculture is no longer economically viable. Before analyzing this factor, it is important to define economic viability.

The economic viability of a parcel of agricultural land is in part a function of its size and the resulting annual income it will yield. Once a parcel of agricultural land, as a result of the subdivision or parcelization processes, is reduced to a certain size, it loses its agricultural economic viability. Minimum parcel size, as it relates to economic viability, can be defined in at least two ways. One definition would relate parcel size to the ability to produce a life-sustaining annual income. Another definition would relate parcel size to the ability to produce an economically practical harvest which may yield less than a life-sustaining annual income. Both definitions of parcel size, life-sustaining annual income and economically practical harvest, are economically viable. This distinction is important because an agricultural preservation policy directed toward maintaining agricultural units which are each capable of producing a life-sustaining annual income would have different parcel size implications than a policy oriented to preserving units which may be economically harvested.

By applying one of the above definitions of economic viability or some other definition, persons owning a small parcel of agriculturally zoned land may conclude that it is not economically viable. Such persons may include individuals who purchased the parcel with or without knowledge of the agricultural zoning or individuals who obtained ownership by inheritance.

In Tehama County, the issue of parcel size as it relates to the viability of agricultural lands has a special significance because of inconsistencies between the land use designations of previous General Plans and the zoning ordinance categories. From the perspective of agricultural preservation, most significant instances of this inconsistency concern the Sacramento Valley region of the County. The 1974 General Plan designates most of this region as A-I, Agricultural Intensive, and A-G, Agricultural General. The current zoning district map for this region classifies most of this region as A-2, with the remaining lands classified as U-A. As shown in Table AG-6, minimum parcel sizes for the plan land use designations exceed those of the zoning district by as much as a factor of 40 to 1.

As discussed in the Preface, the Government Code requires that zoning districts and subdivision maps must be consistent with the General Plan, including consistency with respect to parcel sizes. The inconsistencies described above affect agricultural lands which have been and will be subject to considerable subdivision activity. These inconsistencies raise the possibility of legal challenge of land divisions approved by local government, but which do not conform to the General Plan. This potential in turn creates uncertainty and confusion as what regulations are applicable to agricultural lands subject to inconsistent planning and zoning.

High Land Values. High land values are brought about because of several factors - the desire to buy land because of an inflation hedge, favorable income tax treatment, and the strong market for rural residential housing. High land costs bring high property tax assessments, making it difficult for agricultural operators to acquire more land and also making it difficult for people wanting to enter the agricultural field.

Predator and Pest Control. Predator control has been identified as a continuing problem within Tehama County. Young livestock can be killed, and all livestock is susceptible to having grazing and resting disrupted. Pest control problems resulting from neglected or abandoned crops, especially orchards, also should be addressed.

Keeping People in Agriculture. In an analysis of agriculture the human element is often neglected. A good agricultural economy depends upon good operators. The economics of agriculture is one of the important factors. It is often said that farmers will accept a smaller rate of return on investment because they like the life on a farm or ranch. While there is undoubtedly some truth in this notion, it applies less and less. Young people who grew up in agriculture are better educated and have more opportunities than did their parents or grand parents. Keeping people in agriculture involves much more than economics, however, Agriculturalists must feel that their concerns are heard and responded to by the local government.

People Wanting to Get into Agriculture. A recent phenomenon is the increasing desire of people to be able to enter the field of agriculture. Obviously the County has no obligation to guarantee that they will be able to do this. But the County does have an interest in making sure that insurmountable barriers are not erected against such entry. People should have the opportunity to buy a moderate amount of land and attempt to establish a successful agricultural business just as they could attempt to establish another type of business.

PLANNING STRATEGY FOR AGRICULTURAL PRESERVATION. The following discussion outlines a coordinated and comprehensive set of specific responses to the factors described above which adversely impact agriculture. These responses are then formulated into the "Objectives" and "Policies" sections below. The purpose of the following discussion is to provide a rationale for the objectives and policies. Several observations should be made about the thrust of this strategy. No massive government subsidy of agriculture is recommended. Emphasis is placed on the protection of agriculture and on determining better ways of assisting agriculture. This approach reflects the position that agriculture should be entitled to a reasonable rate of return to the land plus the equivalent of a reasonable salary for labor and management.

Conversion of Agricultural Land to Urban Land. The loss of agricultural land to urbanization takes place both in incorporated cities and in unincorporated areas. A two step approach to this problem is recommended. The first step is the identification of agricultural lands, subcategorized as croplands and grazing lands, as described above in the pattern of agriculture. The second step is to formulate policies that lands design-

nated by the General Plan as eligible for "development"¹ reflect only the amount required for a twenty year time horizon and that future urban/suburban residential development, commercial, and industrial development occur only within incorporated areas, as these areas expand over time through planned annexations. (These policies are contained in the Development Pattern and Community Organization Element.) Special exceptions would be made for uses having high nuisance impacts on urban areas while having low nuisance impacts on agricultural lands.

By designating lands eligible for development, most growth pressures may be directed away from agricultural lands. However, growth accommodation will require some generally lesser value agricultural lands to be designated for development. When this occurs, agricultural lands so designated would be programmed for intensive use in order to use these lands in the most efficient manner.

As described in the Development Pattern and Community Organization Element, the twenty year inventory of developable land will be reviewed at five year intervals to extend its time horizon five years into the future by adding additional lands to the inventory. At these times, decisions would be made as to whether any agricultural lands would need to be converted to development. A special Agricultural Advisory Committee, as described below, would provide advice on these decisions, thereby providing flexibility in agricultural preservation.

Problems at the Agricultural/Urban Fringe. Some type of buffer area is needed between urban and agricultural areas. Examples of such fringe areas include the agricultural areas around Los Molinos and south of Corning. The exact nature of this buffer must be tailored for each urban area and even for different portions of an urban area. In some areas a very low density residential zone may be suitable. A more promising concept is a zone containing a gradient level of development -- the areas nearest the existing urban area would contain a moderate level of development while the areas nearest the agricultural area would permit little if any development. This would require a new type of zone. Appropriate setbacks from the edge of an agricultural area should be maintained.

¹Development: The actual use or commitment of land for the construction of houses, commercial and industrial structures, public service facilities, and related structures, thereby accommodating population growth and associated employment growth within Tehama County. Implicit in this definition of development is the commitment of land to a particular residential, commercial, industrial, or public service use such that any other use of the land is precluded for at least the foreseeable future and would require some type of redevelopment. Under this definition, lands used for agriculture, timber production, and open space are not considered as developed. Also, development does not mean the parcelization or subdivision of land into homesites which may at some future date be provided with services and built on. The distinction is important because the mere creation of homesites does not accommodate growth.

Transactions of property within the buffer zone would require disclosure statements recognizing the existence of the adjacent agricultural lands and associated activities.

The County should continue to use roads and other features, both natural and man-made, to help define the buffer area. In some areas special fencing might be required which could be provided by the local government or by the developer. Many of the buffer areas such as creeks may be suitable for recreational uses as long as the impacts are isolated from the agricultural operations.

It is reasonable to expect that a strong statement on the location of urban boundaries will cause the farmer or rancher to take certain steps to assist in the creation of the buffer. Natural screening may be planted and crop patterns may be changed to reflect the existence of a boundary area.

Scattered Pockets of Development in Agricultural Areas. The existing pockets are very difficult to deal with and should be analyzed on a case by case basis. Buffer areas may be appropriate in some circumstances.

The County should adopt a policy against non-contiguous development. This policy, together with the policy that calls for urban-type development only in incorporated cities or established communities, should eliminate future pockets of development.

Scattered Individual Houses In Agricultural Areas. Increasing the minimum lot size of agricultural lands would have some effect on limiting residential housing in rural areas.

As noted previously, family farm housing may over time pass into the hands of individuals with no interest in agriculture who complain about adjacent agricultural operations. The preservation strategy contains policies designed to ensure that family farm housing sites remain part of the larger agricultural parcel and are not subdivided off into separate lots.

Establishment of Minimum Parcel Sizes. One of the factors described above as adversely affecting agriculture is the existence of parcels too small to support an economically viable agriculture operation. Some of these parcels exist only on paper (paper subdivisions), while others have an actual physical existence. A key element in the strategy for agricultural preservation is the establishment of appropriate minimum parcel sizes for agricultural lands.

The pattern of agriculture in Tehama County provides the basis for establishing ranges of minimum parcel sizes appropriate to the variety of conditions present in the County. These ranges, which are presented in Table AG-7, provide a framework for plan policies designed to preserve agricultural lands in units of a size capable of supporting agricultural operations.

Table AG-7 presents minimum parcel size ranges. Minimum parcel sizes

are expressed as ranges in order to provide some flexibility in their specific application through zoning regulations. When warranted by conditions, parcel sizes at the larger end of a given range should be required. The smaller end of the range represents the absolute minimum, and these parcel sizes should be applied only in situations where larger sizes are not feasible.

These ranges assume that it would be economically worthwhile to use a parcel falling within this range for the primary use listed. Economically worthwhile means that the economic return on this property is attractive. The concept of an economically worthwhile parcel size must be distinguished from the concept of a parcel capable of supporting a family. Under this latter concept, the minimum size of a parcel would in most cases exceed the minimum size under the concept of economically worthwhile. It follows that the full-time operator may require more than one parcel of an economically worthwhile size to support a family.

As noted at the beginning of the Findings, the major issue in agricultural preservation facing Tehama County is whether its citizens are willing to genuinely and wholeheartedly commit themselves to the steps necessary to achieve this objective. The parcel size minimums specified in Table AG-7 are designed to achieve the realization of this objective. Like any other land use regulation, they will to some degree limit the options available to the owners of such lands.

Some owners of agricultural lands may find these limitations unacceptable. However, they are based on the objective of agricultural preservation and the knowledge that introducing non-agricultural uses into agricultural areas will inevitably result in their loss.

Treatment of Substandard Parcels. Application of the parcel size minimum ranges specified in Table AG-7 to actual properties will occur through the operation of the zoning and the land division ordinances under California law which requires these ordinances to conform to the General Plan. This application will create a number of "substandard" parcels, or parcels whose size falls below these minimum ranges. Some of these potentially substandard parcels are located in undeveloped or paper subdivisions; others have in fact been developed.

In assessing the individual parcel ownership pattern, that is, the ownership of non-contiguous units of land, it has been determined that a majority, sometimes reaching 70 - 80% of ownerships in the cropland designation, fall within the 10 to 20 acre parcel size range. Additionally, in this assessment the practical application of "merger" was found to have very little effect on land and actually encumbered only a very low number of small lot owners. Thus, it is recognized that "merger" as it has been known in Tehama County has served very little purpose and is abolished. Parcels considered to be "substandard" must continue to meet Health, Safety, Building setback and other physical standards when considered for residential or other building development. All parcels in existence and meeting the definitions of the State Subdivision Map Act and Tehama County Land Division Ordinance as of the date of adoption of this General Plan are considered eligible for sale, lease, finance or other conveyance and development under applicable zoning, building and health regulations, with

the exception of lands under Agricultural Preserve Contract which are discussed below and excepting those subdivisions specifically noted in Section 4172 of the Zoning Code.

Agricultural Preserve Lands

It is recognized that lands that have been placed under the Agricultural Preserve Contract (Williamson Act) have been done so with the property owners expectation of a differential in tax assessment as required by the Contract. Lands under contract are assessed on a "production value" basis rather than a "market value" basis. The State of California in turn returns to Tehama County subvention payments to partially offset this differential in property tax revenue. The Ag Preserve Contract holder is in fact being compensated for maintaining his land in agricultural production and out of non-agricultural development.

With these facts in mind a separate but mutually beneficial land division policy is established for the Agricultural Preserve Lands of Tehama County.

1. Parcels are allowed to be sold or conveyed separately for any purpose as they were recognized by the Tehama County Assessor at the time that the land was placed under the Ag Preserve Contract providing that the parcels are deemed to meet the requirements of the State Subdivision Map Act and Tehama County Land Division Ordinance. A Certificate of Compliance may be required to effect conveyance.
2. Absent the existence of recognized assessor's parcels meeting State Law and County Ordinance, the minimum size Ag Preserve parcel that may be created is as follows:
 - a) Ag Preserve - Cropland - 40 acres
 - b) Ag Preserve - Grazing - 160 acres

High Land Values. The existence and implementation of the proposed general plan may reduce or at least slow down the rate of increase of land prices of agricultural land. The county can mitigate effects of the high land prices on property tax assessments by continuing to offer the Williamson Act.

Predator and Pest Control. The County should continue to support the predator control program operated by the Agricultural Commissioner. The pest control program related to neglected or abandoned crops should be intensified.

Keeping People in Agriculture. Most of the preceding discussion deals directly or indirectly with the problem of keeping people in agriculture. In addition, an agricultural advisory committee should be established to provide a better link between agriculture and the County government. A strong County commitment to agricultural preservation will make long-term agricultural investment more reasonable.

People Want to Get Into Agriculture. The impact of the general plan upon agricultural land values may make it easier for people to enter agriculture.

Outlined above is a planning strategy for agricultural preservation in Tehama County. The following sections of this element translate this strategy into objective, policies, and implementation measures.

OBJECTIVES

AG-1

Preservation of lands of viable agricultural capabilities according to soil characteristics, with consideration given to access, water, location, and other relevant factors.

AG-2

Protection of lands currently being used for agriculture, but which have marginal agricultural capability characteristics, unless their need for non-agricultural uses is demonstrated..

AG-3

Protection of agricultural lands, whenever possible, from non-agricultural development through separation by natural buffers and land use transition areas that mitigate or prevent land use conflicts,

AG-4

Protection of agricultural lands from development pressures or uses which will adversely impact or hinder existing or foreseeable agricultural operations.

AG-5

Recognition that preservation of agricultural lands emphasizes community understanding and acceptance of the agricultural practices utilized by agriculturalists and ranchers.

POLICIES

AG-a

Agricultural lands in Tehama County shall be classified according to two general categories based on the following criteria:

- Lands capable of supporting grazing.
 - Existing grazing lands used for this purpose, or
 - Grazing lands under Williamson Act contract.
- Land capable of supporting crop production.
 - Lands classified by the U.S. Soil Conservation Service Important Farmlands Study maps as P,S,U,L, and LP; or

- Lands classified by the U.S. Soil Conservation Service Capability Classification System as Class I or II; or
- Croplands under Williamson Act contract.

● Lands classified as described above are generally designated on the five Tehama County Planning Area maps as "grazing lands" and "croplands." In addition to these general designations, these lands shall be more precisely located for zoning map and other purposes using other existing available maps.

* Additionally, lands within the boundaries of the El Camino Irrigation District shall be classified as Composite Cropland based upon the following criteria:

- El Camino Irrigation District is comprised of approximately 7,500 acres and the irrigation water is supplied to the recipients by pumping groundwater through the use of electricity. This has caused the cost of the water to climb to approximately \$21.00 per acre foot for delivery. (1982 - El Camino Irrigation District).
- The El Camino Irrigation District has incurred Bonded Indebtedness through the sale of Bonds for the generation of funds to develop and operate the District. This situation took place in 1923 and the principal and interest payments have not been paid through the years resulting in a substantial indebtedness against every parcel of land within the District. It has been estimated that the per acreage assessment to clear the indebtedness could be as high as \$500.00 per acre. (1982, Gene Reno - El Camino Irrigation District).
- Excluding lands within the Agricultural Preserve in the El Camino Irrigation District, there are approximately 475 parcels of land in El Camino. Of the 475 parcels approximately 75% or 356 parcels are less than 19.9 acres in size. This analysis clearly shows that while the District is made up of a fairly substantial amount of Prime (Class I and II) Agricultural Soils (approximately 4,000 acres) the predominant land ownership pattern (1982) is of a small, composite agricultural character. The predominance of the smaller farming operations amongst the larger ones defines the Composite Cropland Classification for the El Camino Irrigation District.
- Due to the unique circumstances discussed above, the Tehama County Board of Supervisors has determined to provide for an alternative to the minimum parcel size established by the Cropland Classification for the El Camino Irrigation District. Thus the Composite Cropland Classification is applied specifically and solely to the El Camino Irrigation District and the minimum parcel size on lands not under the Agricultural Preserve shall be a 5 acre minimum as shown on Table AG-7.

AG-b

Agricultural lands and other lands shall be reviewed at five year intervals to determine the appropriateness of either their current or potential classi-

fication as agricultural lands. The purpose of this review is to insure that agricultural lands either currently or potentially preserved for agricultural lands either currently or potentially preserved for agricultural uses merit such special treatment and to provide a systematic, uniform and equitable process for the periodic review of current or potential agricultural lands. This review process shall be used judicially.

The review shall be conducted by the Planning Department with the assistance of an Agricultural Advisory Committee composed of members selected by and representing the agricultural industry including but not limited to:

Member, Tehama County Planning Commission
Representative, Tehama County Farm Bureau
Representative, Tehama County Cattlemen's Association
Representative, Tehama County Sheepmen's Association
Tehama County Agricultural Commission
Tehama County Cooperative Extension Director
At-Large Representative appointed by the Board of Supervisors

In its review the Planning Department and the Advisory Committee shall address factors established in the Zoning Code and any recommendations presented shall explicitly state their relationship to Code requirements.

AG-c

Besides the principal uses of agricultural lands; lands so classified may be used for residential purposes accessory to the principal use. Such accessory residential uses shall be limited to "family member" housing and agricultural labor housing and subject to the requirements in the Zoning Code.

AG-d

Non-agricultural lands located adjacent to designated agricultural lands shall be subject to agricultural buffer overlay zoning regulations as delineated in the Code.

AG-e

Divisions of agricultural lands shall comply with criteria established in the Zoning Code and parcel sizes as delineated in Table AG-7. Lot Line Adjustments shall comply with the provisions of the Land Division Ordinance.

AG-f

Designated agricultural lands may be subdivided into two separate parcels to create one site for a life estate retirement homesite provided conditions delineated in the Zoning Code are met.

AG-g

All lands classified as agricultural lands shall be considered to be placed within the Agricultural Preserve and shall be eligible to enter into a con-

tract, as provided by the Williamson Act (also known as the California Land Conservation Act of 1965), upon compliance with conditions in the Zoning Code.

IMPLEMENTATION. The primary mechanisms for implementing agricultural lands policies will be the zoning and subdivision ordinances. Specifically, new zoning districts will need to be developed to correspond to the two general categories of agricultural lands: grazing lands and crop production lands. Each district will be a type of agricultural preserve and will incorporate the appropriate revisions regarding principal and accessory uses, as stated in policy AG-c. Finally, each agricultural zoning district, when it is geographically applied, will be broken into subcategories to reflect the minimum size requirements shown in Table AG-7.

Policies governing the subdivision of agricultural lands will be implemented through the subdivision ordinance.

Provisions in the zoning ordinance relative to Williamson Act contracts will need to be revised to conform to policy AG-g.

Policy AG-e will in part be implemented through the General Plan Planning Area maps. Zoning ordinance revisions will be required to implement the policy governing the siting of dwellings on agricultural buffer lands. A new ordinance, which will be incorporated into the zoning ordinance, will be required to implement the provision addressing the notification of persons purchasing lands adjacent to agricultural lands.

Policy AG-b will be implemented by the Advanced Planning Division of the Planning Department. This division shall take the lead in convening the Agricultural Advisory Committee and developing recommendations for the Planning Commission.

ENVIRONMENTAL IMPACTS. The primary environmental impact of the Agricultural Lands Element will be to encourage the conversion into croplands of some undetermined amount of rangelands located on the west side of the Sacramento Valley. The effect of this element will be to maintain existing agricultural lands in their present use, continuing their current impacts on the environment of Tehama County. The classification of the El Camino Irrigation District to Composite Cropland could allow for an ultimate population increase of approximately 2,900 or 330% over the 1982 population of 1,260. While the ultimate increase has not been chronologically estimated it is important, however, that all citizens of Tehama County realize that potentially significant impacts on prime farm lands, circulation, school, police and fire protection, water quantity, wildlife, public facilities, etc. will occur and the responsibility of mitigating the impacts rests with all taxpayers in Tehama County.

TIMBERLANDS

INTRODUCTION. The Timberlands Element identifies issues relating to the conservation, development, utilization and managed production of forest lands in Tehama County as required by the Conservation and Open Space Elements of the General Plan Guidelines (Government Code Sections 65302(d) and

65560(b)(2)). The Timberlands Element additionally contains objectives and policies which, by law, reflect the land use provisions stated in the Forest Taxation Reform Act of 1976.

FINDINGS. Timber resources cover a substantial portion of land in the Eastern and Western Planning Areas of Tehama County. Of the County's 1,909,000 acres, 460,000, or 24.1% are commercial forest lands, defined as lands capable of producing 15 cubic feet per acre per year of industrial wood.

The primary timberland owner in Tehama County is the Federal government. National Forest Service holdings account for 215,000 acres or 46.7% of the total commercial forest land in the County. These holdings are located in the Lassen, Mendocino, and Shasta-Trinity National Forests. An additional 4,000 acres (0.9%) are owned by other public agencies.

Private holdings account for 241,000 acres or 52.4% of the County's total commercial forest lands. These data are presented in Table T-1.

Tehama County's timberlands are highly valued for their economic contributions in terms of revenue and employment as well as for their benefits to wildlife habitat watershed protection, erosion control, open-space, scenic amenities and recreation.

The 1980 timber harvest in Tehama County was 147,208,000 board feet, valued at \$24,374,000. Of all 18 timber harvesting counties in the state, Tehama ranked 9th in volume and 7th in value (see Table T-2). The significance of timber operations is also evident in the large lumber and wood products industry which accounted for 14% of the 1980 Tehama County employment figures (2,062 persons)¹. This percentage is expected to remain the same for the duration of the planning period 1982-2000.²

The presence of vast holdings by the National Forest Service in Tehama also generates revenue for the County. By law, the Forest Service must return 25% of the timber harvest revenues it collects to the counties in which the forests are located. These revenues are derived from timber sales as well as the revenue derived from grazing, recreation, and mineral extraction permits. This revenue may only be used for public road and schools purposes. In 1981, Tehama County received \$1.5 million in timber yield receipts.

Tehama County recognizes the value of its timber resources by affording protection through the use of Timberland Preserve Zoning (TPZ).

Virtually all of the county's timber resources are protected from conversion to other uses and from adjacent potential land use conflicts under the TPZ provisions.

Timber Preserve Zoning was developed as the primary means of implementing the Forest Taxation Reform Act of 1976, designed to "promote prudent and

^{1,2}Sedway/Cooke, Preliminary Technical Report #2, Population, Employment, and Housing Projections, June 1981.

responsible forest resource management calculated to serve the public's need for timber and other forest products, while giving consideration to the public's need for watershed protection, fisheries and wildlife, and recreational opportunities" (Chapter 176, Statutes of 1976, Section 1). The Act restructures timber and timberland taxation by replacing an ad valorem property tax on standing timber with a yield tax in harvested timber and by establishing a statewide system of preferential assessment for timberlands.

The intent of Timber Preserve Zoning not only seeks to protect the integrity of timber resources but also to prevent the occurrence of adverse impacts from timber harvesting operations on non-timbering land uses. The Timber Preserve Zoning Ordinance of Tehama County designates land uses which are compatible with timber operations and therefore allowable in Timber Preserve Zones. These uses only include those necessary for the management of watershed, fish and wildlife habitat, and grazing; erosion and fire control; gas, electric, water or communication transmission facilities; and buildings or structures accessory to timber growing and harvesting or other listed compatible uses. The ordinance also lists allowable conditional uses requiring permit approval, as well as parcel size and TPZ eligibility requirements.

In addition to TPZ, the land use plan proposed for Tehama County also serves to protect local timber resources. The most potentially damaging threat to the integrity of timberlands is the encroachment of incompatible, non-timber related land uses, primarily residential.

By nature, timber harvesting practices increase noise, dust and traffic, and have the potential to reduce the quality of nearby air, water, wildlife, scenic resources, and public safety. On the opposite end, however, residential land users require clean air and water, are intolerant of high levels of noise, dust and traffic, and demand an assurance of public safety. Thus, where timber uses are located adjacent to non-timber uses, the potential for land use conflict is presented. Moreover, if incompatible uses are allowed to concentrate in these areas, the potential for land use conflict is magnified.

Recognizing the above, the General Plan includes all lands currently under Timber Preserve in its Timberlands land use classification. These lands will be subject to all regulations contained in the Timber Preserve District chapter of the Tehama County Zoning Code. The lands adjacent to Timberlands are designated as either "Open Space" or "Grazing" in order to avoid future land use conflicts and to preserve the resource value of timberlands.

Effective timberland management is also an essential component of timberland preservation. The national demand for softwood timber products is projected to increase 37% by 1990 and 70% by 2030.¹ If Tehama County's timberlands were to achieve their maximum production potential, the result could be economically beneficial to the County.

¹ Mills, T.J. and R. Alig. "Projections of Timber Supplies for the United States: 1976-2030."

Through improved management practices, fire hazard problems may be reduced and wildlife habitat, soil and water resources may be enhanced.

Opportunities for improved management are generally readily available to large timber interests, but less available to private, small tract timber owners. For this reason the state and federal governments sponsor a variety of cost-sharing technical assistance and educational programs for timberland owners.

Two programs sponsored by the California Division of Forestry (CDF), for example, are the California Forestry Improvement Program (CFIP) and the Chapparal Management Program.

The CFIP provides landowners with funds for reforestation, erosion control, and wildlife habitat and timberstand improvement. The Chapparal Management Program is a cost-sharing program between private landowners and the CDF for use of prescribed burning for vegetation management.

The U.S. Forest Service also sponsors four Coordinated Resource Plans in Tehama County. In the Thatcher Ridge area, this planning approach involved a coordinated effort among both public and private landholders and has resulted in a management plan for controlled burns designed to improve grazing, wildlife habitat, fire protection, and water yields.

OBJECTIVES

T-1

Preservation of prime timberlands.

T-2

Protection of prime timberlands from adjacent development which has the potential to adversely impact timber growing and harvesting operations.

T-3

County recognition of the various timber management improvement and education programs as a means to improve timber yields and protect wildlife habitat and watershed lands.

POLICIES

T-a

The Timberlands land use category shall be used to identify and protect lands currently under Timber Preserve Zoning.

T-b

Development of Timberlands shall be subject to the conditions established in the Zoning Code.

T-c

Lands adjacent to Timberlands shall be assigned land use classifications which do not adversely impact timber growing and harvesting operations. These land uses shall be restricted to Natural Resource, Habitat Resource, Significant River or Creekside Corridor, or Grazing Classifications. Commercial Recreation may be a conditional use, subject to use permit approval.

T-d

The County shall promote the use of recognized forest improvement practices and programs.

T-e

The County shall encourage timber production by providing tax incentives to timberland owners through a reduction in the minimum acreage requirement for entrance into a new TPZ District according to the schedule in the Tehama County Zoning Code.

T-f

The County shall not pre-empt the State of California's regulatory authority over forest practices on timberlands. Because the current forest practice rules and regulations already provide protection and consideration for watershed, wildlife, fisheries, range and forage, recreation and aesthetic enjoyment values.

IMPLEMENTATION. Policies T-a, T-b, T-c and T-e shall be implemented through the General Plan Land Use Maps and the Tehama County Zoning Code. Policies T-d and T-f serve as a general guideline for the County and needs no specific implementation.

ENVIRONMENTAL IMPACTS. The policies of the Timberlands Element will not create any significant impacts on the environment. Areas of the County designated as Timberlands by General Plan Land Use Maps are located far from proposed community development, thereby avoiding land use conflict.

Timberlands Element policies are directed toward the conservation, utilization and production of the County's timber resources and as such will help to improve watershed, wildlife habitat, and erosion and fire control.

Potential impacts to the environment resulting from timber harvesting operations include noise, dust and particulate air pollution and alteration to landscape vegetation and associated scenic vistas or views. Mitigation of potential impacts occur through the preparation of a Forest Management Plan prepared by all landowners as a prerequisite for inclusion in the TPZ.

WATER AND WATER QUALITY

INTRODUCTION. The purpose of the Water and Water Quality Element is to present information and a discussion of the issues which affect the supply and quality of water used in Tehama County. Topics addressed in this element include agricultural water supplies, water development projects, erosion, and other water polluting factors. The element has been prepared in compliance with Government Code Sections 65302(d) and (e) and the conservation and Open Space Elements, respectively.

FINDINGS. The water resources of Tehama County are essential to its environmental and economic well-being. Because of abundant supplies, the County supports strong agricultural, timber and sport and commercial fishing industries. Water resources also contribute to a valuable wildlife resource base and an aesthetically pleasing environment - attractive to both residents and tourists.

Water supplies are available via surface flows diverted from the Sacramento River and its tributaries and from underground sources stored in the Sacramento Valley Groundwater Basin. Both of these water sources and their respective users are described below.

GROUNDWATER. The major groundwater source in Tehama County is the Sacramento Valley Groundwater Basin (SVGB). The portion of the SVGB located within Tehama runs the length (North-South) of the County and is contained on the east and west by the borders of the Eastern and Western Planning Areas. Maps of the SVGB at 7-½ and 15 minute scales are available from the Tehama County Planning Department.

Because of the vast amounts of water stored within this basin, supplies are more than adequate to meet domestic water needs through the year 2000 and beyond. Groundwater supplies, however, are not infinite. As the population of the areas served by the SVGB increase, greater demands will be placed on its reserves. It is important that local governments, through the General Plan programs, take steps to ensure continued replenishment of SVGB supplies.

The major process of groundwater replenishment or recharge in Tehama County involves percolation of stream flows into underlying permeable materials. Because of thick deposits of sand and gravel, the sustained flow of streams tributary to the Sacramento River in Tehama County promote groundwater recharge. The primary watercourses associated with recharge include Reeds, Red Bank, Elder, Thomes, Antelope, Deer and Mill Creeks. A recent study prepared by the Department of Water Resources reports that the recharge areas for the SVGB located in Tehama County account for nearly 21% of the total annual recharge for the entire groundwater basin.¹ The largest recharge area in the County is supplied with water by Elder, Thomes, and the west side of Mill Creeks, and alone accounts for 10.1% of the total SVGB annual recharge.²

^{1,2}State of California, Department of Water Resources, Evaluation of Ground Water Resources: Sacramento Valley. Bulletin No. 118-6. August 1978.

A second process of groundwater recharge is direct percolation of the rains which fall on permeable soils. In Tehama County, the only area where the soils contain few barriers to percolation are along the Sacramento River, ranging in width from 0 to 2 miles (approximately) from the river's banks. Soils containing hardpan or other consolidated earth layers that restrict the vertical flow of water occupy large areas on the east side of the Sacramento River. Similarly, clayey soils, located in the valley areas of Tehama County to the west of the Sacramento River also impede groundwater replenishment. Runoff from these areas is not readily absorbed into the groundwater table, but eventually flows into surface waters. Runoff from agricultural, commercial or residential development may become a water quality problem if the runoff contains unwanted substances such as oil and grease from streets, litter, animal wastes, pesticides and any variety of settled air pollutants.

Deep percolation of unused irrigation water may also contribute to groundwater recharge, although these amounts are only secondary to the streamflow and precipitation processes. Much of the unused irrigation water is consumed via evapotranspiration or runs off into streamflows.¹

Once outside the boundaries of the Sacramento Valley Groundwater Basin, roughly corresponding to those of the three I-5 corridor planning areas, the ability to locate and accurately assess the extent of groundwater sources is diminished. The fact that only 6.3% of the County population² resides in these areas (which make up the largest percentage of the land area in Tehama County) is indicative of this fact. Existing development in these regions obtain water from wells located on individual properties where available groundwater sources have been located. Creek or streamfront property owners using riparian rights may supplement groundwater wells with surface flows in the upland areas as well.

The above discussion of groundwater has several implications for the Tehama County General Plan. First, recognizing the importance of groundwater recharge areas not only for Tehama County, but also for the entire Sacramento Valley, it is important to maintain open space along the Sacramento River and areas along its major tributaries outside of the SVGB to facilitate basin recharge. Secondly, due to the scarcity of water in the upland regions of the County, the General Plan recommends only limited future development in these areas. Lastly, groundwater resources are finite and increasing growth in Tehama County and the state as a whole will result in increased demands for SVGB supplies. Future efforts by all land use sectors (residential, commercial and industrial) to conserve water resources whenever possible will help to ensure adequate supplies for generations to come.

Surface Water. With the exception of property owners holding riparian rights, all surface water flows in Tehama County are allocated by either the state (State Water Resources Control Board) or Federal (Central Valley Project).

¹ California Department of Water Resources: Bulletin No. 118-6: Evaluation of Ground Water Resources: Sacramento Valley. August 1978.

² Technical Report #2, Population, Housing and Employment Projections.

government and are used by the twelve irrigation districts listed in Table W-1. Yearly allocations to each of these districts, as presented in Table W-1, are based on a low-flow or dry-year water volume, meaning that in most years more water will be available than is indicated by the allocation schedule. This explains why the Elder Creek Water District, for example, currently uses 8000 acre feet/year (AF/yr) despite the fact that their yearly allocation is only 4,600 AF/yr. In the event that a drought should occur, the Elder Creek District would only be able to draw 4,600 AF from the Corning Canal.

The Rawson, Richfield, Los Molinos and Deer Creek Water Districts have not established permanent contracts with either government agency. The Rawson and Richfield districts are sold water on a year-by-year basis after allocations to contracted districts have been made. In lean water years, supplies available to these districts may be severely limited. The Los Molinos Mutual Water Company on the other hand was established prior to allocation scheduling by the Bureau of Reclamation (Central Valley Project). This district draws water from diversion dams along Mill and Antelope Creeks. Supplies are therefore subject to fluctuation of yearly creekflows, although in drier years surface supplies may be supplemented by company-owned and operated groundwater wells.

The Deer Creek District also does not purchase water from the federal government. The district utilizes flow from Deer Creek and, as in the case of the Los Molinos Co., is subject to yearly water level fluctuations which in turn affect yearly supplies.

Surface and Groundwater Issues. Surface water resources and supply systems are adequate to meet the anticipated Tehama County agricultural needs of the immediate future. However, if increases in irrigated agricultural practices continue, water supplies may become more dependent upon underground resources. This is particularly evident in the Central I-5 Planning Area, the most agriculturally productive region in the County. Agricultural wells generally range in depth between 500 and 1,000 feet deep and draw between 4,000 and 5,000 gallons per minute (gpm). These wells draw substantially greater amounts of water than domestic wells which are usually 100 feet deep and draw between 5 and 18 gpm, depending on the season and purpose of water use.¹ Although groundwater overdraft is not currently a problem in Tehama County, it has been reported in other areas of the Sacramento Valley Groundwater Basin. In order to prevent overdraft from occurring in Tehama County, careful monitoring of groundwater use will be needed.

The dynamics of groundwater resources are very complex and at the present time are far from being understood by water experts. It is suspected, however, that once absorbed into an underground basin, water is not static but flows within it, regardless of jurisdictional boundaries. Assuming this to be true, it would be prudent for Tehama County to investigate the organization of a groundwater management committee comprised of representatives from all counties located within the boundaries of SVGB. A multi-county management district would be more effective than several individual county districts as it would provide more accurate documentation of groundwater supplies and could facilitate a program

¹Phil Lorens, Supervising Engineering Geologist, Department of Water Resources, Red Bluff, California. Personal communication, 9 April 1981.

whereby groundwater deficient areas could receive supplies from groundwater rich areas elsewhere in the basin, thereby helping to prevent overdrafts.

A second issue affecting water resources involves encroachment of non-agricultural (residential, commercial, industrial) development within irrigation districts. This is currently a concern in the Corning and Los Molinos areas.

Establishment of an irrigation district requires a considerable financial commitment for the installation of irrigation facilities (pipes, ditches, pumps) which, by nature, are not appropriate for domestic water delivery. The introduction of residential uses, therefore, would mean additional costs in order to provide domestic water services as well as financial losses for the irrigation district in terms of clientele and capital investment. Additionally, residential development typically involves parcel splitting and often results in the loss of valuable agricultural lands for anything but residential uses.

In recognition of this issue, the General Plan discourages future non-agricultural development in irrigation districts. The land use plan for the Corning area, for example, would locate future growth to the east of the city, away from the Corning Water District and its productive agricultural soils. The exception to this general guideline is the growth accommodation adjacent to Los Molinos. The General Plan calls for suburban and small-lot rural development north of the Los Molinos community within the boundaries of the Los Molinos Mutual Water Company (irrigation districts). The existing parcelization pattern and level of development, however, indicate that these lands are largely committed to residential uses. The General Plan recognizes that development within the district will have negative impacts on the operations and finances of the Mutual Water Company. In response to these problems, appropriate piping of open irrigation ditches and establishment of right-of-way access as a prelude to development would contribute to the mitigation of these impacts.

Water Projects. Additional issues affecting water resources in Tehama County concern the possible construction of two water development/flood control projects. The first of these, the Cottonwood Creek Project, was authorized for construction by Congress in the Flood Control Act of 1970, pending completion of feasibility studies by the U.S. Corps of Engineers. The project involves construction of two multipurpose lakes: Dutch Gulch Lake on the main stem of the Cottonwood Creek and Tehama Lake on the south fork of Cottonwood Creek in Tehama County. The Corps is in the process of developing its final design memorandum report and Environmental Impact Statement. These reports are scheduled for completion in October of 1982, with project construction beginning in 1986 and ending in 1990 or 1991.

The second project, the Thomas-Newville Reservoir, has been authorized by the Burns Porter Act of 1960 as part of the State Water Project (SWP). Initial engineering studies have been completed, but final authorization for construction cannot be granted until the final design and environmental impact reports are available. At that time, final authorization would be granted by the Director of the California Department of Water Resources and the California Water Commission. If authorized, the Thomas-Newville Project would be constructed in the 1990's.

Cottonwood Creek Project Impacts. Construction of the Tehama Lake Reservoir would result in the removal of approximately 10,000 acres of land currently used for grazing purposes in the Western Planning Area. Loss of this land would also reduce the wintering habitat of the Tomhead and Beegum deer herds. Existing roads in the area, State Highway 36 and Bowman Road, would have to be rerouted to either the north or south of the reservoir. Construction of Dutch Gulch Lake, although a major concern to Shasta County, would also somewhat reduce the land area of Tehama County. Dutch Gulch Lake boundaries are proposed to extend south of Cottonwood Creek and would probably also necessitate realignment of Highway 36. The possibility of recreational activities (boating, waterskiing, picnicking) at either or both of these lakes has been discussed, although provisions for recreational development would be made only if non-Federal (i.e. County or private) sponsors were found.

In the event that these reservoirs are used for recreation purposes and depending on the degree of recreation use, the Bowman area could be significantly impacted by tourist recreation traffic and pressures for second home and commercial recreation development. These pressures would likely result in increased demand to subdivide existing grazing and croplands in the area to accommodate residential and commercial development. Such development, combined with its service demands, could substantially alter the existing character of the Bowman area.

Other impacts would include flood control, potential new employment opportunities, and possible enhancement of anadromous fish habitats by maintaining a minimum streamflow during critical low-flow months and by use of salmon propagation facilities.

Thomes-Newville Project Impacts. The Thomes-Newville Reservoir would store between 1.4 and 1.9 million acre-feet of water and would cover about 8,000 acres of land in Tehama County in the south-central region of the Western Planning Area. This land is currently in private ownership and used for grazing. Construction of this reservoir would mean the displacement of approximately 70 residents and would reduce the winter range of the Lake Hollow deer herd. Realignment of Paskenta Road would also be necessary. Recreational development at this site is not proposed at the present time, although it may be in the future. Existing recreational facilities at nearby Black Butte Reservoir, however, may be able to accommodate recreational demand in this area for the next 5 or 10 years.

The General Plan recommends that lands surrounding the proposed project sites remain in grazing until construction is authorized. At such time, land use changes shall be influenced by the findings of the environmental impact studies and input from federal, state and local agencies.

Water Quality. Responsibility for the maintenance of water quality begins at the federal level as directed by the Federal Water Pollution Control Act of 1972 and implemented by the Environmental Protection Agency (EPA). At the state level, water quality protection is provided by the State Water Resources Control Board which establishes rules and regulations geared towards designing effective management of the quality and quantity of the state's water resources. At the regional level, water pollution and quality control is handled by the Regional Water Quality Control Boards, of which there are nine in California.

Based on the state's view that local water quality issues are best handled at the regional level, these Boards are entrusted with the power to implement state water pollution and quality control legislation.

Statutory authority for water quality control is also granted to the California Departments of Public Health, Fish and Game, and Water Resources. The Department of Public Health additionally retains police powers for sanitation controls not already granted to the State Water Resources Control Board or the Regional Water Quality Control Board.

The U.S. Department of Agriculture Soil Conservation Service has provided data for the septic/leachfield suitability of soils in the Central Regions of Tehama County. This information has been mapped at the 7½ minute scale and is on file with the Tehama County Planning Department. The degree of soil limitations for septic/leachfield use is expressed in three categories: slightly, moderately and severely limited. An in-depth discussion of the implications of septic/leachfield suitability for land use planning is presented in the Public Facilities Element.

At the present time, there is no evidence of major surface or ground water quality problems in Tehama Caounty. Lack of concrete evidence indicating significant water quality issues should not suggest that future problems might not occur.

Pollution of the Sacramento Valley Groundwater Basin, for example, may become an issue if non-sewered development is allowed to concentrate on soils with limited capacity to naturally treat septic tank effluent. Potential problem areas include the Antelope Valley, Los Molinos, Tehama and Gerber areas where small lots, individual septic/leachfield systems and individual wells located in regions with a seasonably high groundwater table have caused leachline seepage and backup and pollution of domestic drinking water supplies.¹ Possible pollution mitigation measures include careful septic tank siting and, where appropriate, the use of seepage pits or evapotranspiration systems as opposed to leachfields. Soil suitability analyses and on-site monitoring of septic tank efficiency may also help to avoid problems such as those described above. Additionally, the establishment of community wastewater treatment systems should be encouraged when it becomes cost-effective to do so.

A second area of water quality concern lies in the Bowman area (North I-5 Planning Area) where leakage along A.C.I.D.² irrigation ditches has caused an unnatural increase in the groundwater table level. Consequently, leachline effluent is not able to percolate and thus rises to the surface.³ Careful attention to future leachline siting and construction, as well as efforts to seal the A.C.I.D. canal, should, however, ameliorate this problem and any similar problems in the future.

^{1,3} Lee Mercer, Tehama County Health Department, personal communication.

²Anderson-Cottonwood Irrigation District.

Surface water quality may be adversely affected by land uses adjacent to surface watercourses. Department of Water Resources studies¹ have indicated that the clearing of vegetation and drainage of irrigation water along the Sacramento River have increased riverbank erosion potential. While the DWR studies focused on the Sacramento River, its findings may apply to all surface water flows in Tehama County. Also, agricultural practices potentially threaten water quality when disposal of chemical-laden wastewater enters nearby watercourses through irrigation ditches.

Agricultural operations constitute only one source of erosion. Construction of roads and structures also contribute to erosion via grading, vegetation removal including timberland harvesting, and structure locations. Erosional hazards occur countywide, yet are most damaging to water supplies when they exist along surface watercourses. Regulations designed to reduce erosion threats include grading and drainage standards as conditions of new development, vegetation removal limitations, and development siting standards. These regulations are further discussed in the Policies and Implementation sections of the Water Element which follow:

OBJECTIVES

W-1

Protection and conservation of water resources and supply systems.

W-2

Protect surface water quality and streamflows for water supply, recreation, and aquatic ecosystem maintenance.

W-3

Encourage existing and new development to incorporate water conservation measures which decrease overall water use requirements, minimize runoff, and thereby maximize groundwater recharge.

W-4

Maintenance, to the extent feasible, of open space along the Sacramento Valley Groundwater Basin to assure continued recharge of groundwater resources.

W-5

Develop land use specifications for areas adjacent to the Cottonwood and Thomas-Newville water projects responsive to project impacts.

¹Department of Water Resources. Land Use Changes in the Sacramento River Riparian Zone - Redding to Colusa. An Update 1972-1977. June 1979.

W-6

Unless overriding economic or social circumstances are evidenced, future residential subdivision development within existing irrigation districts should be discouraged to preserve their agricultural integrity, unless the agricultural use is no longer present.

W-7

Ensure the high quality of groundwater by emphasizing programs which minimize erosion and prevent the intrusion of municipal and agricultural wastes into water supplies.

W-8

Document on a County-side basis septic tank performance to permit the collection of locational data concerning failures and water well contamination.

W-9

Experiment, on a limited basis, with alternative wastewater treatment systems to establish their economic and technological feasibility for use in areas having limited soil suitabilities.

POLICIES

W-a

Significant River or Creekside Corridor land use subcategories shall be used to indicate areas essential to the recharge of groundwater and to afford protection from stream bank erosion.

W-b

The County shall encourage monitoring of irrigation runoff to prevent infiltration of herbicides/fertilizers/pesticides and municipal wastes into streams, rivers of the groundwater basin. The County shall also encourage irrigation water recycling.

W-c

Consistent with the General Plan development pattern and where deemed a reasonable on or off-site improvement by the advisory agency, division of lands within all water district or county service area boundaries shall be conditioned by the following:

- Provision of right-of-way access to irrigation infrastructure in order to facilitate their maintenance.
- Open irrigation ditches appropriately piped and sited to permit their continued use.

W-d

Areas adjacent to the Cottonwood and Thomes-Newville Project sites shall remain in Grazing or Natural Resource categories until the project construction begins. Future land use designations shall be dependent on findings published in the environmental impact statements and other documents for each project.

W-e

Development densities in areas outside the Sacramento Valley Groundwater Basin and in areas with low-septic/leachfield suitability shall be consistent with the General Plan Land Use Map and the provisions listed in Tables C0-7,8,9,10 and 11.

IMPLEMENTATION, Policy W-a shall be implemented through the application of regulations currently under the jurisdiction of the Reclamation Board, State of California and California Department of Fish & Game.

Policy W-b shall be the responsibility of the Tehama County agricultural commissioner in cooperation with the Regional Water Quality Control Board and the Department of Water Resources.

The Tehama County Land Division Standards shall be amended to reflect Policy W-c.

Policy W-e shall be implemented through future revisions of the General Plan.

ENVIRONMENTAL IMPACTS, The General Plan will not result in significant changes in the quantity or quality of groundwater supplies in Tehama County. The Development Capability Analysis prepared as part of the General Plan Revision Program (Technical Report #3) identified lands suitable for accommodating future growth away from groundwater recharge areas. Additional development will occur in regions of the County which overlie the Sacramento Valley Groundwater Basin. Safe yields from this basin should be sufficient to supply all projected development within the valley area of the County for the next 20 years (Phil Lorens, DWR, personal communication, 4 June 1981).

The Sacramento River corridor, another source of groundwater recharge, is also protected by the "Significant River or Creekside Corridor" land use designation which severely limits development. Policies W-a and W-b specifically address the need to protect groundwater resources.

Water quality is expected to experience some limited adverse environmental effects as the result of General Plan implementation. The greater incidence of paved surfaces (as a result of increased growth and development) and continued discharges from agricultural activities (herbicides, fertilizers, animal wastes) via irrigation ditches may act together to deterioriate water quality. Provisions for clustered development and required setbacks from creek/river banks would reduce impacts, as would agricultural discharge monitoring and encouragement of irrigation water recycling (see Policy W-b and Implementation section).

Mining operations, particularly gravel extraction sites, may affect changes in the deposition or actual amount of gravel in creekbeds. Such land uses also potentially accelerate the natural process of erosion. These impacts may be mitigated through implementation of Minerals Policy M-c in accordance with the Surface Mining and Reclamation Act of 1975.

The flow of flood waters will be altered if construction of one or all of the proposed water projects are authorized and constructed. The Cottonwood Project reservoirs (Dutch Gulch and Tehama Lakes) together could eliminate damage from a 100-year flood along Lower Cottonwood Creek and could reduce flood damages on lands along the Sacramento River. The U.S. Corps of Engineers estimates that there would be modest flood control benefits along Thomes Creek and the Sacramento River if the Thomes-Newville Project were constructed. However, the flood control capabilities of the Thomes-Newville Reservoir have not been extensively studied. Additional findings are anticipated in the near future.

AIR QUALITY

INTRODUCTION. Government Code Section 65560(b)(4) requires general plans to include policies which will result in the preservation of "...open space for public health and safety, including...areas required for the protection and enhancement of air quality."

Air quality planning programs are also subject to standards and procedures established by the Federal Clean Air Act. Pursuant to this Act, each state must prepare an implementation plan to meet its requirements. California's State Implementation Plan (SIP) is a compilation of analyses and control measures which are sufficient to demonstrate achievement and maintenance of National Ambient Air Quality Standards (NAAQS). Two requirements of the SIP are particularly significant to Tehama County and are addressed in Findings below.

FINDINGS: Topography and meteorology are key factors in determining an area's "air pollution potential." This term refers to the relative ability of an airshed to dilute and disperse air pollutants. Air pollution potential is independent of emissions so that an area with a low air pollution potential, even if extensively developed, will have better air quality than an area with high air pollution potential which is only lightly developed.

Given the topographical and meteorological characteristics of Tehama County, the air pollution potential of the region is very high. In a nationwide survey, the interior of northern California and southern Oregon were found to have the highest air pollution potentials in the continental United States.¹

Topographic and meteorological information for the entire Sacramento Valley Air Basin (SVAB) is presented below. This is in recognition of the fact that air resources know no political or jurisdictional boundaries, and therefore that the air quality impacts of the Tehama County General Plan must be considered on a regional as well as a local level.

¹ Holzworth, G.E.; Mixing Heights, Wind Speeds and Potential for Urban Air Pollution Throughout the Contiguous United States; U.S.E.P.A. Office of Air Programs, Publication No. 101, January, 1972.

Topography.¹ The Sacramento Valley Air Basin (SVAB) is the northern half of California's Great Valley and is bordered on three sides (west, north, east) by mountain ranges, with peaks in the eastern range above 10,000 feet.

It is approximately 13,667 square miles and essentially a smooth valley floor with elevations ranging from 40 to 500 feet. The rolling valley is interrupted by the Sutter Buttes, an area of 80 square miles in northern Sutter County which rises abruptly to more than 2,100 feet.

Meteorology. The Sacramento Valley Air Basin experiences approximately 75% of the possible sunshine hours annually. The average maximum/minimum temperatures are 90° F/58° F for Sacramento in the south of the SVAB and 97° F/67° F for Redding in the northern portion of the air basin.

Annual precipitation is around 15 inches in the western portion of the air basin which lies on the lee side of the Coast Ranges. The effects of this "rain shadow" are gradually reduced with eastward movements across the air basin to the point where an annual precipitation as much as 60 inches is reached at the far eastern side.

Coastal air enters the valley through the Carquinez Straits and undergoes rapid modification in temperature and relative humidity. Part of the flow turns northward into the Sacramento Valley and part southward into the San Joaquin Valley; thus, the two Valleys have separate and distinct wind circulation systems. Evidence suggests that coastal air may also enter the Sacramento Valley through other higher gaps in the Coast Range as far north as Colusa County.

The general circulation in the SVAB permits the transport of pollution over long distances along the axis of the Valley.

A rare but important weather type occurs in the valley when a high pressure cell is positioned over the Pacific Northwest. During the late winter and spring months, the resulting northerly winds are unseasonably warm, dry and dessicating. This wind is termed the "Norther" or in some cases the "mono wind," depending on whether the trajectory is directly down the valley or from the east over the Sierra Nevada. This type of circulation is not confined to the spring months and has occasionally created an extreme fire hazard in late summer and fall. If this weather type occurs during agricultural burning, emissions are carried into the urbanized southern portion of the basin.

Inversions occur in the SVAB with great frequency in all seasons. The most stable inversions occur in late summer and fall. The summertime inversions, especially those at Sacramento, are often the result of marine air pushing under an overlying warm air mass. These are termed "marine inversions" and are generally accompanied by brisk afternoon winds which provide good air circulation. In contrast, many autumn inversions are the result of warm air subsiding in a high pressure cell where accompanying light winds do not provide adequate dispersion.

¹The following discussions of topography and meteorology are contained in Chapter 13, SIP; "Sacramento Valley Air Basin - Air Quality and Control Strategy Analysis"; State of California Air Resources Board; April, 1978.

Photochemical smog in the early summer and fall is enhanced by the almost unbroken succession of warm sunny days during these seasons.

Carbon monoxide, oxides of nitrogen, particulate matters, and lead particulate concentrations in the late fall and winter are highest when there is little interchange of air between the Valley and the coast and when humidities are high following winter rains. This type of weather is associated with radiation fog, known as tule fog, when temperature inversions at ground level persist over the entire Valley for several weeks and air movement is virtually absent.

Heavy winter fogs are most frequent and persistent in the southern portions of the Sacramento Valley and in the Delta area. During the winter seasons of 1972 through 1974, Sacramento experienced an average of 36 day/year with heavy fog. Red Bluff at the north end of the valley reported only 19 days/year, or about one-half that of the Sacramento area. One implication of the less fog days in the north end of the valley is that there are more days for potential photochemical activity.

Air Quality Planning. The Clean Air Act Amendments of 1977 require the identification of areas which do not meet NAAQS. These areas are referred to as "non-attainment areas" and require the preparation of a Non-Attainment Plan which must contain legally enforceable measures which will lead to attainment of federal standards. In 1978 Tehama County was designated as a non-attainment area for oxidants and unclassified for total suspended particulates. In February of 1979 the EPA relaxed the oxidant standard from 0.08 parts per million (ppm) for all oxidants to 0.12 ppm for ozone alone (ozone is the main constituent of oxidants, but there are others).

Because of the relaxed standard, Tehama County was reclassified to attainment for ozone by EPA in a final rulemaking on August 11, 1980. It remains "unclassified" for total suspended particulates. This designation is due to insufficient data and a forthcoming revision of the particulate standard. With this classification Tehama County is not required to prepare any air quality plans.

The 1977 Amendments to the Clean Air Act also require that the State Implementation Plan limit emissions and take other measures necessary to prevent significant deterioration of air quality in regions with air quality which is better than the standards require. The Act establishes three classes for determining how much further deterioration would be allowed in levels of sulphur dioxide and total suspended particulates. It also requires the Federal Environmental Protection Agency to establish regulations to prevent the significant deterioration of air quality from the emissions of such pollutants as hydrocarbons, carbon monoxide, photochemical oxidants (ozone or "smog") and nitrogen oxides. Class I is permitted the smallest increment of deterioration and Class III the largest. There are two Class I areas in Tehama County: the Yolla Bolly Wilderness and Lassen National Park.

Implementation of the Tehama County General Plan would not contribute to the further deterioration of the two Class I areas. The proposed development pattern does not locate future development or other air polluting land uses adjacent to these areas. For this reason, significant adverse impacts on the air quality of Mt. Lassen National Park and the Yolla Bolly Wilderness are not anticipated.

Air Quality Issues. A major threat to air quality in Tehama County involves the location of agricultural operations in close proximity to sensitive areas, such as wildlife habitat and residential land uses. Agricultural activities frequently involve the application of pesticides or fertilizers or the concentration of large numbers of animals. Odors and chemical particulates may then be carried by the wind into nearby areas. Similarly, dust and dirt from plowing or harvesting operations may also impact adjacent land uses. These impacts are particularly applicable to the I-5 corridor planning areas of the County where significant growth is occurring adjacent to valuable agricultural uses. In order to achieve an acceptable balance between these uses, the General Plan, whenever possible directs future growth away from agricultural uses. It is inevitable, however, that some land use conflicts as described above will occur. For this reason, permits for the application of chemicals and regulations regarding animal waste disposal must be strictly enforced in these areas.

Additional air quality impacts will inevitably occur merely as the result of Tehama County growth. More people means more cars, which in turn implies more air pollution from auto exhaust. The proposed General Plan circulation pattern, however, mitigates adverse impacts on air quality by locating future growth in areas of the County which are already substantially developed. Through this strategy automobile trip lengths between home and work are minimized, thereby reducing emissions. Proposed amendments to Tehama County road standards, which call for paving requirements, will also reduce the occurrence of dirt roads within developed areas and associated air quality impacts of dust and dirt.

Dust and smoke from timber operations also pose threats to air quality. Dust may result from various harvesting activities, from felling trees to their transportation to mills. Smoke from slash burns or the burning of understory vegetation emits a variety of gasses and particles into the air which affect visibility and cause odor. These impacts, however, are highly localized and restricted to the Eastern and Western Planning Areas. Lumber mills, on the other hand, are located in the I-5 corridor, closer to population centers, but future residential growth is not proposed for the lands surrounding these industrial uses.

OBJECTIVES

A-1

Preserve and protect the existing air quality of the County.

POLICIES

A-a

Future air quality shall be maintained by encouraging a compact development pattern and by encouraging alternative modes of transportation (transit, bicycles, trails) when they become feasible.

A-b

A Non-Attainment Plan shall be developed and implemented if the County no longer meets state and national air quality standards.

IMPLEMENTATION. Policy A-a implemented through adoption of the Revised General Plan. Its future implementation shall be the responsibility of the Tehama County Planning Department.

Policies A-b shall be the responsibility of the Tehama County Agricultural Commissioner and Air Quality Management District.

ENVIRONMENTAL IMPACTS. The emissions inventories for Tehama County in 1979, 1982 and 1987 were obtained from the Air Resources Board (ARB). They were adjusted for the higher growth rate projected in the General Plan. The adjusted emissions inventory is shown in Table A-1.

Unplanned fires, such as wildfires and structural fires, were eliminated from the inventory because they vary widely from year to year and estimates of this source are extremely inaccurate.

The ARB estimates are based on E-150 population projections that showed the following populations for Tehama County.

	<u>E-150</u>	<u>General Plan Projection</u>
1980	34,997	39,400
1985	37,758	47,200
1990	40,548	56,900
1995	42,988	66,100

The ARB conducted emissions inventories for 1982 and 1987 because these are the years that attainment of the standards must be shown (1982 for all pollutants except where an extension to 1987 is granted for ozone and carbon monoxide).

From the revised emissions inventory based on the General Plan's high population projection, it is concluded that Tehama County air quality will remain very much as it is now. Population increases will offset stricter emissions controls, with a net effect of slightly worse air quality in 1987 than in 1979.

Projected increases in emissions, even under high population growth rates, are not sufficient to make Tehama County a nonattainment area through the end of the planning period.

WILDLIFE RESOURCES

INTRODUCTION. The Wildlife Resources Element presents a discussion of issues affecting the plant and animal populations of Tehama County. This element also addresses the problems associated with conflicting land uses along the county's riparian zones. The purpose of this element is threefold: to promote protection and maintenance of county wildlife resources, to prevent their wasteful destruction or neglect, and to recognize their ecological, recreational, and aesthetic values. The following discussions have been prepared in compliance with the

Conservation Element (Government Code Section 65032(d) and the Open Space Element (Government Code Section 65032(e)).

FINDINGS. Tehama County supports a wide range of wildlife populations. Big game, game birds, waterfowl and numerous fish species are found in the County, including several rare and/or endangered species. A variety of plant communities, several which are rare or endangered, also thrive in Tehama County.

The wildlife species diversity enjoyed by the County would not be possible, however, without also a diversity of natural habitats to support them. Information from a variety of wildlife experts has been collected and used in the Tehama County General Plan. The California Natural Areas Coordinating Council (CNACC) and the California Department of Fish and Game (DFG) have identified areas of Tehama County which are biologically and/or geologically unique, have scientific or educational significance, or which are representative of various biotic communities found in California. These areas have been mapped and are described in Tables WR-1 and WR-2. The California Natural Diversity Data Base (CNDDB) has provided information on riparian vegetation throughout the County, as has the DFG. The DFG has also identified and mapped significant wildlife habitats, including those of rare and/or endangered species, and critical fish streams. The California Native Plant Society (CNPS) has provided information on rare and endangered plant species found within Tehama County. The CNPS list is utilized by the DFG as possible candidates for those that have not been acted upon to date. The official DFG list can be obtained from the CNDDB in Sacramento.

While rare and endangered wildlife habitats (both plant and animal) have been identified and mapped, this information has been withheld from publication to protect these sensitive areas. Listings of rare and endangered species, however, are presented in Table WR-2 (animals) and WR-3 (plants).

Contributions of wildlife resources to Tehama County are far-reaching. Not only are these wildlife resources ecologically valuable, but they also provide direct benefits to people as they contribute to aesthetic enjoyment and provide recreational and educational opportunities and income.

The diverse wildlife resources of Tehama County form the basis of excellent recreational fishing and hunting opportunities, support thriving commercial fisheries and enhance the rural lifestyle experiences valued by all residents. Perhaps more significant in a global sense, human beings depend upon natural diversity, such as in Tehama County, to maintain ecological stability and to ensure a healthy environment. Preservation of these resources is therefore essential if we wish to guarantee a healthy environment for generations to come.

To protect and maintain documented, significant wildlife habitats for their aesthetic and ecological values, the General Plan utilizes the "Habitat Resource" subcategory of the Natural Resource Conservation Land Use Classification. Lands under this category should remain in their natural states yet may allow passive, low intensity recreational activities such as hiking or nature study, of these activities do not threaten the integrity of the habitat.

Planning Options. Perhaps the most difficult wildlife issue in Tehama County involves striking an acceptable balance between competing interests in wildlife areas. In many cases, these competing interests involve private property owners wishing to utilize their lands as they desire and those who believe wildlife areas should remain in their natural states, virtually undisturbed by human activity. Compromises become necessary in order to resolve these issues to the satisfaction of all and to avoid the "taking" of land for public use without just compensation. The County, therefore, must be able to accurately assess the value of its wildlife areas, and the various demands for their use, development and/or preservation.

Within the scope of the General Plan, there are several options available to the County to resolve wildlife issues. The first option is land use regulations, which may take many forms. In "Habitat Resource" areas regulations might include a determination of the type and intensity of land use activities which would be permitted, the type, siting and design of structures, and overall development densities. Specific regulations would reflect the conditions surrounding the particular resource to be protected. Land use regulations are very effective in terms of habitat preservation, yet they frequently conflict with the land use plans of private property owners. A typical example of such a conflict in Tehama County might occur between cropland owners whose lands also contain valuable riparian communities.

A second option for issue resolution is the establishment of environmental review guidelines. Agencies such as the DFG would have the opportunity to review future development proposals to ensure that any adverse impacts on wildlife resources would be mitigated, prior to development approval by the Planning Department. Although this option is effective on a case by case basis and allows very site specific attention, environmental review guidelines used as the sole protector of wildlife resources for the entire county would be noticeably insufficient.

A third planning option involves the public purchase of significant habitat areas. Within Tehama County there are various programs available to purchase private lands in habitat areas, yet the number of property owners willing to sell are few. Public acquisition is also hampered by a shortage of funds which are not expected to increase significantly during the 20 year planning period.

The above discussion indicates that several planning options exist. To balance protection of wildlife habitats and private property rights, implementation using all three methods discussed above will be necessary.

Specific Wildlife Planning Issues. Due to the sensitive nature of wildlife resources, the impacts of inadequately planned County development can be disruptive to wildlife habitats. In Tehama County, declining fish populations, removal of native streamside plant communities and alteration of other significant habitats have been associated with a growing and developing region.

Fish. Given the economic importance of the fisheries industry to Tehama County, a marked decline in anadromous (migratory) fish counts along the Sacramento River is of concern to both commercial and recreational fisherman.¹ As an

¹Department of Water Resources, Upper Sacramento River Spawning Gravel Study, 1980.

example, in 1981 it was estimated that the value of one King Salmon (11 pound average) caught in the Sacramento River for commercial fishermen was \$27, while the value of the same fish to a sport fisherman was estimated at \$70. Based on these values and the number of King Salmon caught in 1981 (288,000 commercial, 150,000 sport), the total value of the King Salmon caught in the Sacramento River comes to \$18,276,000. Assuming that approximately 40% of the King Salmon are caught within the borders of Tehama County, this places the value of King Salmon to Tehama County at \$7,310.400.¹

Gradually declining fish populations have been attributed to a variety of factors, although of primary significance has been the gradual removal of spawning areas along the Sacramento River and its tributaries which currently support less than 10% of the historical spawning areas in California's Central Valley.²

Gravel extraction operations and rip-rapping for riverbank protection are two activities which may disrupt spawning activities. Gravel extraction operations remove significant amounts of spawning sized gravel which would otherwise be deposited into the Sacramento River system. Similarly, rip-rap can inhibit natural riverbank erosion processes which provide the gravel necessary for spawning. Conflicts between gravel removal and spawning becomes particularly critical when gravel removal is coupled with the construction of upstream dams and levees as well as rip-rap, thereby increasing stream velocity and washing gravel away, leaving only larger stones along the riverbed. Gravel supplies are essential for anadromous fish spawning as the small stones provide a protective layer for deposited fish eggs. Buried under a layer of gravel, fish eggs await fertilization and later undergo incubation and hatching, all in an environment protected from predators. The loss of gravel sources may thus result in a declining reproductive rate, with subsequent losses in yearly fish yields.

A second major factor attributed to declining anadromous fish populations is the development of diversion dams which substantially reduce creek flows during the summer and early fall months. Flow reductions are particularly an issue along reaches of Antelope, Deer, and Mill Creeks where they run through extensively developed agricultural lands along the Sacramento Valley floor. Created to supply water for irrigation districts, local water companies, or to individuals with riparian rights, the cumulative impact of several diversion dams along these Sacramento River tributaries may cause reaches of these creeks to become dry from late spring into early fall, particularly in low flow years. Due to the fact that these tributaries are part of the Sacramento River System, reduced flows and/or dryness could have serious adverse impacts for the anadromous fishing industry along the entire stretch of the Sacramento River.

Significant fish streams (warmwater, anadromous, and resident trout areas) have been identified and mapped by the California Department of Fish and Game. These watercourses would be protected for their fishing resource value by the Significant River/Creekside Corridor subcategory of the Natural Resource Conservation land use classification. The watercourses identified by the CDFG include: The

¹Richard Hallock, Fisheries Biologist, California Department of Fish and Game, Redding, California.

²DWR, Upper Sacramento River Spawning Gravel Study, 1980.

Sacramento River and Deer, Antelope, Mill, South Fork Battle, Cottonwood, Thomes, and Elder Creeks.

Future Water Development Projects. Three water development projects have been proposed for construction in Tehama County during the 20 year planning period. The first of these, the Thomes Newville Reservoir, would cover roughly 15,000 acres in both Glenn and Tehama Counties with a storage capacity of 1.9 million acre feet. A preliminary outline of the environmental impact report indicates that deer winter habitats, salmon runs in Stony Creek and bald eagle foraging areas may be adversely affected. Similar impacts might be expected from construction of the federally funded Dutch Gulch and Tehama Lakes. Despite the fact that construction of these projects, if funded, would not be complete for several years, the County should nonetheless be involved with the environmental impact process so that if any or all of the projects are approved, measures may be incorporated into future revisions to the General Plan which will allow the project sponsors to mitigate adverse impacts on the County's wildlife resources.

Small Scale Hydroelectric Projects. Growing concern regarding world energy supplies has led to a growing interest in the development of small scale (less than 30 megawatts) hydroelectric power projects along several of Tehama County's streams and creeks. Concentrations of these small power plants, however, have the potential to adversely impact fish and riparian habitats, block anadromous fish migrations, and pollute stream courses. Of particular concern are diversion dams located along Antelope, Deer and Mill Creeks which contain some of the most valuable salmon and steelhead spawning waters in the County. Construction of these projects may also have adverse impacts on migratory deer herds, particularly the East Tehama Deer Herd. The installation of roads, transmission lines and other dam related structures reduces the amount of habitat and foregoing areas available to these animals.

Riparian Communities. The term "riparian" describes the bank, or lands adjacent to the bank of a river or other fresh watercourse, which is comprised of soils with significantly high moisture contents. Riparian vegetation therefore refers to those plant species with very shallow root systems or those which are capable of surviving with their roots completely submerged in water. A concentration of riparian vegetation is called a riparian community, a term used extensively in the General Plan and which refers to the relationship among the plants of a geographically definable area (a riparian zone) to one another, as well as to their environment.

By nature of their diversity, riparian communities also play a key role in maintaining environmental stability. Riparian communities protect water quality through natural filtration processes, facilitate groundwater table recharge, help protect riverbanks from erosion, and provide habitat for numerous plant and animal species.

The largest and most significant riparian communities in Tehama County are located along the Sacramento River.¹ Four riparian community categories have been identified in Tehama County along the river and are briefly described in Table WR-4. Locations of these communities are also indicated for the I-5 corridor planning areas as "Significant River or Creekside Corridors" on the General Plan maps. Other significant creeks supporting riparian vegetation are listed in Table WR-6.

¹ Burke, Mary, Element Preservation Plan - Riparian Forests, The Nature Conservancy, 1980.

Because the majority of lands adjacent to the Sacramento River in Tehama County are intensively farmed, riparian communities are among the few places where some wildlife forms can exist. Over 50 bird species, for example, nest in this riparian vegetation, including 2 endangered and 1 rare.

From the Shasta-Tehama County border south to Red Bluff, the Sacramento River passes through a narrow belt of riparian vegetation along its banks and is flanked by a foothill woodland plant community, dominated by live oak, California buckeye, red bud and digger pine. In contrast to riparian communities further north, this area is more diverse, supporting several species of willow and alder, as well as cottonwoods, ash and sycamore. The undeveloped lands along this reach support a variety of wildlife. Commonly seen mammals include deer, opossum, coyote, otter, beaver and muskrat. Several bird species are also dependent upon the natural environs. These include dove, heron, osprey, egret, quail and numerous songbirds. Approximately 30% of all King Salmon spawning in the Sacramento do so in this reach.

South of Red Bluff, agricultural development becomes the predominant land use along the Sacramento River, replacing much of the valley grasslands and riparian communities that at one time covered the Sacramento Valley. The remaining riparian vegetation from Red Bluff to the southern County border is more abundant than that north of the City and in some instances covers a width of $\frac{1}{2}$ mile. This reach also contains numerous oxbow lakes¹ which provide excellent habitat for many aquatic birds such as heron and egret. Oxbow lakes also provide excellent opportunities for warm water fishing. Many of the same plant and animal species mentioned, however, are breeding areas for wood ducks which require tree hold nesting sites and dense willow thickets used by the rare California yellow billed cuckoo.

In the 1850's an estimated 775,000 acres of riparian vegetation grew along the Sacramento River, sometimes as much as 2 miles wide. By 1952, however, the area dropped to 27,000 acres, and by 1977 it was estimated that less than 18,000 acres of riparian vegetation remained along the Sacramento River.² Between 1952 and 1972, river reaches in Tehama County experienced significant decreases in high terrace riparian vegetation. Between Woodson Bridge and the southern County line 1,800 acres of riparian vegetation were removed. This region also witnessed the greatest increase in orchard lands - over 3,400 acres.³ Between 1972 and 1977 an additional 1,031 acres of orchard were established along the Sacramento within Tehama County.

Studies prepared by the Department of Water Resources, the U.S. Corps of Engineers⁴ and the Nature Conservancy⁵ tend to confirm that a major percentage of the riparian vegetation now remaining would be eliminated within the next 20 years as population growth continues. Another opinion is that the allowance of certain land uses, particularly cropland, pose the greatest threat to riparian communities⁶ as cultivation of terrace lands reduces habitat areas through the removal of native vegetation.

¹Oxbow lakes are formed as a river meanders across a floodplain leaving land bridges at the upper and lower ends of the meandering waters.

²Burke, Mary, Element Preservation Plan - Riparian Forests, The Nature Conservancy, 1980.

³Department of Water Resources, Land Use Changes in the Sacramento River Riparian Zone, Redding to Colusa, April 1975.

⁴U.S. Corps of Engineers, Land Use Changes in the Sacramento River Riparian Zone: Redding to Colusa, 1975.

⁵Burke, Mary, op.cit.

⁶Tom Stone, California Department of Fish and Game.

Although the native vegetation may be only forbs and grasses, plant associations of this type are the natural precursors of lush climax riparian communities (See Table WR-3) and as such are worthy of protection under General Plan policies. Grading and clear-cutting for agricultural purposes can hasten natural erosion of riparian lands. The infilling of oxbow lakes for cultivation may also threaten riparian community integrity. Removal of shade trees adjacent to oxbow lakes causes an increase in water temperatures during the summer months - a critical time for many fish species which require cool waters for survival.

Be it cropland, commercial, recreation, or residential development, the cumulative impacts of intensive human activities along riparian corridors¹ are detrimental to their survival.

Land uses which do not threaten riparian community integrity, such as grazing and low intensity recreation, could be permitted uses along riparian corridors. With careful management, cattle or sheep may graze in riparian zones without significant adverse affects on the vegetative community.² Special grazing management procedures for these areas might include fencing to ensure that enough native vegetation is left ungrazed for the continuance of native grass populations or limitations on the number of cattle and sheep allowed to graze per acre of riparian land. Low intensity recreational activities could also be permitted uses along riparian corridors. As used in the General Plan, low intensity recreation refers to activities such as fishing access, hiking and picnicking. These land uses do not generally require the construction of buildings, roads or large parking lots and typically involve relatively small groups of people.

To ensure the preservation of riparian communities, the Tehama County General Plan includes the "Significant River or Creekside Corridor" subcategory of the Natural Resource Conservation land use classification. The land use conditions of this subcategory would include conscientious land management practices involving vegetation removal and appropriate siting and clustering of structures.

These conditions attempt to balance the need to protect the integrity of these significant natural areas with the rights and desires of private property owners.

AVAILABLE FUNDS FOR PUBLIC ACQUISITION OF RIPARIAN RESOURCES. There are various funds available for public acquisition of both riparian and habitat lands. The following briefly discusses available funds:

The 1976 Urban and Coastal Bond Act set aside 1.5 million dollars for riparian and interior wetlands acquisition. The Department of Fish and Game has used approximately 1.2 million dollars to date.

In the 1982-83 State budget, there is 3.7 million dollars allocated for land acquisition for critical habitats and rare and endangered species habitats from the Energy Resources Fund. Some of these monies could be used for riparian habitat acquisition, especially where the rare yellow-billed cuckoos are located.

In the 1982-83 Wildlife Conservation Board Budget, there is currently 4 million dollars available for land acquisition.

¹ Riparian corridors are defined as the land 50 feet on either side of a riparian stream as identified in Table WR-6.

² Tom Stone, DFG.

The California Environmental License Plate Fund has 2.3 million dollars available. Some of these funds could be utilized for riparian habitat lands acquisition.¹

Access to all public water courses must comply with state regulations contained in the California Government Code, Article 3.5. Public Access to Public Resources. The intent of this legislation is to ensure access to public natural resources such as riparian corridors in the face of rapid growth rate which may foreclose future access points. Under this Article, public access is required of all subdivisions which "... front upon a public waterway river or stream and which does not provide, or have available, reasonable public access...from a public highway..." (Government Code Section 66478.4). However, "if the local agency makes a finding that such reasonable public access is otherwise available within a reasonable distance from the subdivision..." public access requirements via subdivisions shall be waived (Government Code Section 66478.8). To date it has been the policy of Tehama County to waive these access requirements for subdivisions along the Sacramento River based on the amount of existing access, as documented in Table WR-5. This policy should be continued for at least the immediate future, but should be periodically reviewed during plan revisions to assess its adequacy.

OBJECTIVES

WR-1

Preserve environmentally sensitive and significant lands and water valuable for their plant and wildlife habitat, natural appearance and character.

WR-2

Afford, to the extent feasible, adequate protection to areas identified by the California Department of Fish & Game and the California Natural Diversity Data Base as critical riparian zones.

WR-3

Support and coordinate County plans with interjurisdictional programs for the proper management of riparian resources in the County.

POLICIES

WR-a

Significant wildlife and wildlife habitats shall be protected through designations under the Natural Resource Conservation Land Use Classifications as shown in Table WR-6.

WR-b

Future land division applications located within lands subject to the Natural Resource Conservation land use classifications or within one mile of a rare or endangered plant or wildlife habitat shall be referred to the Department of Fish & Game for review and comment.

¹ A.E. Naylor, Regional Manager, Region 1, State of California Department of Fish and Game, written communication, 4 February 1982.

WR-c

The significant river and creekside corridors shall be designated on zoning maps using the subcategories shown in Table WR-6.

WR-d

The natural habitat resources shall be designated on General Plan Maps using the subcategories shown in Table WR-6.

WR-e

Water diversions/dams constructed along anadromous fish streams shall be designed to protect fish populations and to ensure adequate flow levels for spawning activity during migratory seasons in accordance with State and Federal regulations.

WR-f

For purposes of public access, the County shall continue, whenever possible, to purchase private lands fronting the Sacramento River and also encourage easement donations from private property owners for similar purposes.

IMPLEMENTATION. The planning conditions described for the Natural Resource Conservation Land Use classification and subcategories shall be translated into zoning regulations and described in detail by the revised Tehama County Zoning Ordinance.

The Environmental Review process (Policy WR-b) shall be implemented through cooperative actions by the Tehama County Planning Department and the California Department of Fish and Game and aided where necessary by other wildlife experts.

ENVIRONMENTAL IMPACTS. Impacts on Tehama County's wildlife resources are related to land use changes proposed by the General Plan. Significant impacts may be mitigated through stated land use designations, policies and regulations.

Plant Life. The General Plan will not have significant impacts on the diversity, number, or normal replenishment of plant species, including those which are rare or endangered. Riparian plant communities located along the Sacramento River and its tributaries shall be protected by inclusion in the Natural Resource Conservation land use subcategory of "Significant River or Creekside Corridor."

Other significant plant communities, including those continuing rare or endangered species, shall be protected primarily through designation under the "Habitat Resource" subcategory of the Natural Resource Conservation classification. Development siting conditions may also be required in order to maintain plant habitat integrity.

Animal Life. Neither the diversity nor numbers of animal species, including those which are rare or endangered, are expected to decline due to implementation of the Tehama County General Plan. As in the case of plant life, animal habitats shall be protected under the "Habitat Resource" subcategory of the Natural Resource Conservation land use classification. This subcategory includes habitats, migration corridors, and seasonal range areas as identified by the California Department of

Fish and Game. Grazing and passive or low-intensity recreational activities may be permitted, provided these activities do not threaten habitat integrity. Measures to ensure habitat value might include controlled burning and livestock grazing. Additionally, the California Department of Fish and Game will review any land division or development proposals which may have significant habitat impacts.

Deer migration corridors identified by DCFG are located predominantly in the Eastern and Western Planning Areas and on lands designated grazing or timber lands in the revised General Plan, or are publicly owned (Mendocino National Forest, Lassen National Forest, State Game Refuge). Limited residential development is planned for these areas and migration corridors will not experience significant environmental impacts.

Impacts to existing fish habitats may be significant. Of particular concern to fish habitats are the potential locations of small scale hydroelectric projects and the development of agricultural diversion dams. Implementation of the General Plan policy WR-e requiring that future projects be designated to ensure adequate flow levels for spawning activity should mitigate said impacts.

An unavoidable adverse impact of the General Plan will be deterioration of wildlife habitats in and surrounding proposed residential growth areas. Siting, clustering and environmental review requirements shall mitigate these impacts. Also, the Plan's development pattern locates future growth areas outside identified valuable plant communities and wildlife habitats.

MINERALS

INTRODUCTION, The Minerals Element satisfies planning requirements established by the Conservation Element (Government Code Section 65032(d) relating to "...the conservation, development, and utilization of ...minerals," including rock, sand, and gravel resources.

This element also complies with the requirements of the Open Space Element which calls for "Open-space for the managed production of resources, including mineral deposits, including those in short supply..." (Government Code Section 65560(b)(2)).

In 1975, the California Legislature enacted the Surface Mining and Reclamation Act to prevent adverse environmental impacts of mining operations, to reclaim mined lands, to encourage production and conservation of minerals, and to also consider the value and potential uses of mineral areas for recreation, watershed, wildlife habitat and scenic enjoyment and the elimination of public health and safety hazards associated with mining activities (Public Resources Code 2712). The requirements of this Act are described in further detail in the Findings section which follows.

FINDINGS. The majority of Tehama County's mineral wealth is derived from the extraction of non-metallic sand, gravel, and volcanic cinder, which are used primarily by local paving and construction industries. Because of their bulky, heavy character, aggregate resources¹ are expensive to transport, and given increasing transportation costs, the sand and gravel deposits located close to the developing areas of Tehama County are valuable assets. As of May 1981, there were 32 mineral

¹Aggregate is defined as non-metallic materials such as sand and stone, which are used to make concrete.

extraction operation permits granted in Tehama County. The locations of these operations have been mapped and are on file with the County Planning Department.

Other mineral resources found in the County include aragonite, borax, chalcopyrite, chromite, copper, cristobalite, galena, garnet, opal, pectolite, penninite, sassolite, and Walistonite.¹ Of these, chromite offers the best possibilities for development.² Chromite is an important metal used in steel production, yet almost all of the nation's demand for this metal is currently met by importation rather than domestic production. In future years, domestic production of chromite may become a necessity due to rising importation costs and/or decreasing foreign supplies. At such a time, the demand for chromite deposits in Tehama County may increase, resulting in the future development of chromite mining operations. The Raglin Ridge area along the North Fork of Elder Creek in the Western Planning Area contains the most significant deposits of this metal.³

Natural gas and geothermal resources are also located in Tehama County. Natural gas fields are found in the South I-5 Planning Area to the northeast and to the south of the City of Corning. Geothermal springs are located in the Eastern and Western Planning Areas and in Lassen National Forest (portions of Eastern Planning Area of Tehama County, Plumas, Lassen and Shasta Counties). The thermal springs in Lassen National Park are of a moderate surface temperature ranging from 66°C to 129°C (150°F to 264°F). If located on private lands, these springs could be used for direct heat application such as space heating or cooling. Two geothermal springs are located on private lands in Tehama County. The first is situated at the junction of Salt and Dry Creeks in the Western Planning Area. The second is located in the Eastern Planning Area, also along Salt Creek, Northeast of Red Bluff. Both of these are low temperature springs, 38°C and 30°C respectively (100°F and 86°F). As such, they may be suitable for direct heat application or for agricultural purposes if used in conjunction with other energy resources. At the present time, however, little direct use has been made of these resources.

Construction and mining constitute only 4% of Tehama County employment reflecting the relatively low intensity of mineral development in the County today. Though this figure is small, mining should not be considered an insignificant contribution to the County's economy and is worthy of protection under General Plan policies and programs.

The Surface Mining and Reclamation Act. Requirements of the Surface Mining and Reclamation Act of 1975 (hereinafter the "Act") state that cities and counties must adopt an ordinance(s) "...which establishes procedures for the review and approval of reclamation plans and the issuance of a permit to conduct surface mining operations." (Public Resources Code Section 2774.) The intent of this legislation is to ensure the prevention or mitigation of the adverse environmental impacts of mining, the reclamation of mined lands, and the production and conservation of mineral resources are consistent with recreation, watershed, wildlife, and public safety objectives (Public Resources Code 2712).

¹California Division of Mines and Geology, Minerals of California; Bulletin No. 189, 1966, page 540.

^{2,3}Marvin Stinson, Geologist, State Office of Mines and Geology, Personal Communication, 2 April, 1981.

The Tehama County Zoning Code complies with the requirements of the Act by permitting "the commercial excavation of natural materials...in any (zoning) district upon the securing of use permits in each case. The excavation of natural materials shall be in conformance with all provisions of the Surface Mining and Reclamation Act of 1975 and future amendments thereto."

Also according to the Act, in association with regulations of the State Board of Mines and Geology, the State Geologist must identify mineral areas of the state which are threatened by incompatible land uses that would preclude mining activities. These areas are to be classified as one of four Mineral Resource Zones (MRZ) or as a Scientific Zone as explained in Table M-1. This classification system must be incorporated into the General Plan of cities and counties supporting mining operations, including dredging and quarrying, and is intended to ensure that mineral resources will be available when their development is necessary or economically feasible.

At the present time, the State Geologist has not identified any MR Zones or S Zones in Tehama County. However, such a designation may be necessary in the future. General Plan policies contained in this Element therefore provide for this possibility.

Although the State Geologist has not identified any MR or S Zones in Tehama County, this should not imply that land use conflicts between mineral extraction operations and non-mineral related land uses do not potentially exist. A prime example of potential conflict is the land area north of Red Bluff.

Four gravel extraction operations are presently functioning along Dibble and Blue Tent Creeks in the North I-5 Planning Area and are in close proximity to lands designated as future suburban residential areas by the General Plan. Although present residential development in these areas is low, the General Plan provides for their future protection by means of setback requirements and land use buffers. As residential development increases, these requirements may need to be supplemented by regulations limiting hours of operations and noise and/or dust generation. These regulations should be incorporated into the Tehama County Zoning Code, as they are applicable as impact mitigations for a variety of land use conflicts.

OBJECTIVES

M-1

Encourage the use of the County's energy and mineral resources.

M-2

Encourage commercial and industrial development of mineral resources in accordance with an acceptable plan covering methods of operation and in a manner that does not preclude the fulfillment of other stated Objectives.

POLICIES

M-a

Mineral extraction operations and accessory uses shall be conditionally permitted in areas inherently compatible with mining. These lands are characterized by their low economic value in both land and improvements.

M-b

To protect both mineral and non-mineral related land uses, future development adjacent to conditionally permitted mineral extraction operations shall be regulated to avoid conflict with mineral resource development.

Regulations as delineated in the Zoning Code shall be responsive to the type/intensity of the mining operation and the nature of the adjacent land use.

M-c

A reclamation plan shall accompany all applications for mining or mineral extraction use permits.

IMPLEMENTATION. Implementation of Policies M-a shall be achieved through land use designations on General Plan Maps and enforced through the revised Zoning Ordinance.

Policy M-b & M-c shall be implemented on a case-by-case basis through the Tehama County use permit process, as prescribed by the Tehama County Zoning Code.

ENVIRONMENTAL IMPACTS. The General Plan will not have any significant impacts on the future development of mineral resources. Metallic mineral sites have been identified by the State Office of Mines and Geology. The General Plan proposes no growth in these areas during the 1982-2000 planning period. The same is true of geothermal resources, and for several of the ongoing gravel extraction operations.

The future of mineral mining in the more densely populated and developed areas of the County shall be protected through the requirement of mitigation measures and reclamation plans which reduce or eliminate impacts from adjacent land uses on mining operations and, conversely, the impacts of mining operations on adjacent land uses. These mitigation measures and plans shall be prepared in compliance with the State Surface Mining and Reclamation Act of 1975.

NATURAL RESOURCE LANDS AND RECREATION

INTRODUCTION. "Resource Land" is defined as any area of land which is essentially unimproved or undeveloped, and which is devoted to any of the following uses:

(1) Open space for the preservation of natural resources including, but not limited to, areas required for the preservation of plant and animal life, including habitat for fish and wildlife species; areas required for ecological and other scientific study purposes; rivers, streams, bays and estuaries; and coastal beaches, lakeshores, banks of rivers and streams and watershed lands.

(2) Open space used for the managed production of resources including, but not limited to, forest lands, rangeland, agricultural lands and areas of economic importance for the production of food or fiber; areas required for recharge of groundwater basins; bays, estuaries, marshes, rivers and streams which are important for the management of commercial fisheries; and areas containing major mineral deposits, including those in short supply.

(3) Open space for outdoor recreation including, but not limited to, areas of outstanding scenic, historic and cultural value; areas particularly suited for park and recreation purposes, including access to lake-shores, beaches, and rivers and streams; and areas which serve as links between major recreation and open space reservations, including utility easements, banks of rivers and streams, trails and scenic highway corridors.

(4) Open space for public health and safety including, but not limited to, areas which require special management or regulation because of hazardous or special conditions such as earthquake fault zones, unstable soil areas, flood plains, watersheds, areas presenting high fire risks, areas required for the protection of water quality and water reservoirs and areas required for the protection and enhancement of air quality. (Government Code Section 65560(b).)

The above definition indicates that the term "Resource Land" can be used in a variety of contexts. It also suggests why the Resource Lands Element is one of the broadest in scope of the nine mandatory general plan elements.

Recreation, although a sublement of the Natural Resource Lands element which may be presented as a separate optional section of a general plan is included with the Resource Lands Element in recognition of the interrelationship between them. Recreation is also discussed in the Public Facilities Element and focuses on recreation at the community level. The discussion in this section evaluates recreation as it relates to County-wide resources.

FINDINGS. Resource Lands. Resource Land in Tehama County is necessary for many land use activities. Open space is required for timber; agriculture, both grazing and cropland; habitat maintenance; and recreation. Table NR-1 provides a more detailed listing of the resource lands of the County.

The value of open space lands lie in their diversity. They are significant contributors to County economy (agriculture, timber, tourism); they enhance the quality of the environment (plant and animal habitat, watershed, water quality); provide buffers between conflicting land uses; contribute to the County's scenic beauty; and enhance the quality of life experienced in Tehama.

Tehama County is fortunate in possessing a vast amount of resource lands. Despite the fact that future growth in the County will reduce some of this area, the General Plan's development pattern will maintain an adequate supply of open space. Aside from the General Plan proposals and policies, the citizens of Tehama County are also instrumental in maintaining open space. Timber, grazing and cropland uses are still very strong industries in the County and are expected to continue as such for many years.

Tehama County is fortunate in possessing a vast amount of resource lands. Despite the fact that future growth in the County will reduce some of this area, the General Plan's development pattern will maintain open space. Timber, grazing and cropland uses are still very strong industries in the County and are expected to continue as such for many years.

RECREATION, The General Plan Revision Program required the preparation of a draft Open Space Element. The 1977 Tehama County Comprehensive Parks and Recreation Plan stands as a separately bound document which constitutes an existing Recreation Element. In order to satisfy California State Planning Law, the revised General Plan must contain recommendations for the necessary revision of existing general plan elements to ensure an internally consistent and integrated document. The discussion which follows identifies areas where modification is needed to achieve internal plan consistency.

GENERAL PLAN CONSISTENCY WITH EXISTING RECREATION ELEMENT. The existing Recreation Element will need to be updated to reflect future recreation demand based on the population projections made elsewhere in the revised General Plan.

The element should also be amended to include a discussion of the recreation potential and possible impacts of the Cottonwood Creek Water Projects as this information becomes available. Based on present knowledge, recreational facilities such as boating and picnicking would only be provided if private funds were utilized.

OBJECTIVES

NRR-1

Protection of resource lands for the continued benefit of agriculture, timber, grazing, recreation, wildlife habitat, and quality of life.

NRR-2

Provide access to resource land areas when neither the integrity of the natural resource nor private property rights will be adversely affected.

POLICIES

NRR-a

Resource lands shall be protected by the provisions outlined in the Natural Resource Conservation Recreation Resource land use classification, Table NR-2, and the policies contained in the applicable elements of the Resources Group.

IMPLEMENTATION. Resource Lands policy NRR-a shall be implemented by adoption of the revised General Plan and Zoning Code.

ENVIRONMENTAL IMPACTS. The future growth of Tehama County will result in a reduced amount of Resource lands. For more detailed discussion of impacts on specific open space resources (e.g. agriculture, wildlife resources), please refer to the appropriate element.

SCENIC HIGHWAYS

INTRODUCTION. The scope of the General Plan Revision work program required the preparation of a draft Land Use, Open Space, Conservation, Circulation, and Public Facilities elements. The existing Scenic Highways Element is contained in a separate bound document together with the Safety, Seismic Safety, and Noise Elements prepared by the Tri-County Area Planning Council (Tehama, Glenn, and Colusa Counties; Cities of Red Bluff, Corning, Tehama, Willows, Orland, Colusa, and Williams). In order to satisfy California State Planning Law, the General Plan incorporates by reference the existing Scenic Highways Element and contains the following finding regarding internal consistency.

GENERAL PLAN CONSISTENCY WITH THE EXISTING SCENIC HIGHWAYS ELEMENT. The development pattern of the Community Organization and Development Pattern Element provides for land uses which are consistent with objectives of the existing Scenic Highways Element.

HISTORIC AND ARCHAEOLOGICAL RESOURCES*

INTRODUCTION. As mandated by the Open Space Element, "...(A)reas of outstanding... historic and cultural value..." shall be afforded protection under the general plan. (Government Code Section 65560(b)(3).)

Tehama County is rich in historic and archaeological resources, some of which are already protected under state or national landmarks legislation. Although perhaps not significant on a state or national scale, many areas possess historic or cultural resources which are locally or regionally significant. Implementation of General Plan policies can thus become the means to provide protection for these resources at the local or county level.

FINDINGS. Prior to Euro-American settlement, the upper Sacramento Valley and the foothill areas to the east of the Sacramento River were the territory of the Wintun Indian Tribes. Traces of this society have been found at two major archaeological sites: one, the "Los Molinos Vicinity - Ishi Site" in Deer Creek Canyon, and the other, the "Sulphur Creek Archaeological District" in the Mill Creek vicinity. These sites contain projectile tips, burial sites, examples of basketry, matting fragments, and other items related to Indian settlement life. Both areas are listed on the Federal Register of Historic Places.

→ These two sites, however, represent but a few of the archaeological resources known to exist in Tehama County. In addition to the two described above, excavations have uncovered several hundred prehistoric sites, including burial sites, west of the Sacramento River where the Nomi Lackee Tribe is known to have settled. Additionally, over 250 settlement sites have been identified along the Sacramento River in Tehama County, as well as several along river tributaries in the foothill regions of the County.

Although several archaeological regions have been identified, many sites are characterized by a lack of knowledge regarding their prehistory. The quality of existing information, moreover, is highly variable.

In comparison to archaeological data, historic (post 1542 A.D.) settlement is well documented. Several historic sites are under the protection and management of the state or federal government and are listed in Table HA-1. To a large extent, the historic resources of Tehama County already receive much public attention. Plaques designate the location and describe the significance of sites identified by the State Historic Landmarks program and the Federal Register of Historic Places. A listing of these sites is also published in state and federal documents which are available to the general public.

* A historic resource is defined as any structure, place or feature which is or may be significant to the post - 1542 A.D. history, architecture or culture of the nation, state, region or community. An archaeological resource is defined here as any mound, midden, settlement, burial ground, rock art or other location containing evidence of human activities which took place prior to 1542 A.D.

In Tehama County, two of the California Registered Historic Landmarks have been further utilized. The Residence of General William B. Ide, under the auspices of the State Department of Parks and Recreation, is designated as a Historical/Cultural Area Park and provides picnicking facilities as well as historic information. The Cottage of Mrs. John Brown, another State Landmark, also serves as a museum, as does the Kelley-Griggs House. Although not a state landmark, the Kelley-Griggs House Museum is a locally significant home of the classic Victorian style.

Other locally significant historic sites in Tehama County include the original Masonic Lodge and Original Tehama County Jail in the City of Tehama and the former Leland Stanford Ranch in Vina, now occupied by a Trappist Monastery. Although these sites are not currently recognized as significant by either the state or federal historic agencies, they are important to the historic development of Tehama County, and as such are worthy of preservation and protection under General Plan policies.

The existence of several local organizations concerned with the history of Tehama County also contribute to the recreational and educational experiences of historic resources. The list of organizations include the Tehama County Genealogical and Historical Society, the Tehama County Museum Foundation, the Tehama County Historical Commission, and the Trinitarianus Chapter 62, E Clampus Vitus. The latter group, although a statewide organization, became locally involved with the 1981 installment of the plaque marking the first Tehama County Courthouse (State Historical Landmark No. 183).

In contrast to historic resources, the archaeological resources of Tehama County are not accessible to the general public. This is primarily due to the sensitive nature of prehistoric sites and artifacts, but also to the lack of areas where public access can be controlled to prevent artifact damage. However, sites in Tehama County with visible surface indications as past cultural activity could be utilized for interpretive displays. These would include rock shelters, midden sites in association with prehistoric dwellings, rock walls/circles, and petroglyph or pictograph sites.

Despite this potential, the future development of prehistoric resources in Tehama County for the public benefit may be long in coming. The high rate of growth in Tehama County, as well as all of northern California, and consequential development increases represent threats to archaeological records. Additionally, expanding recreational use in much of the backcountry areas has exposed many regions to vandalism and unauthorized artifact collecting. Thus, the rate of knowledge acquisition and the success in prehistoric site preservation are in danger of being exceeded by the rate at which this irreplaceable information is being lost.

A prime example of this issue concerns the proposed construction of the Thomas-Newville Reservoir. If built, the reservoir would mean the destruction of at least 8 aboriginal sites. Construction of the Cottonwood Creek Projects would similarly preclude further prehistoric cultural investigations of sites identified in these areas. Provisions for intensive archaeological research must therefore be developed in order to obtain the information available from this region.

OBJECTIVES

HA-1

Preserve the historic and archaeological resources of the County for their scientific, educational, aesthetic, and recreational values.

POLICIES

HA-a

The County shall refer any development proposals affecting historic resources to the Tehama County Historical Commission and when necessary, request an evaluation by a professional historian of the significance of the resource in question and appropriate measures for its protection.

HA-b

Encourage the nomination of significant historic and archaeological sites to the California Historical Landmarks Series or to the Federal Register of Historic Places.

HA-c

Encourage public and private agencies and organizations to develop interpretive and educational programs in order to safely utilize historic and prehistoric sites for community benefit.

HA-d

The County shall require appropriate surveys and site investigations when needed as part of the initial environmental assessment for development projects in accordance with the California Environmental Quality Act (CEQA). Surveys and investigations shall be performed under the supervision of a professional archaeologist or other person qualified in the appropriate field, and approved by the County.

It is recognized that Timber Harvest Plans have been declared by the State to be functionally equivalent to environmental assessments required by CEQA.

HA-e

Encourage the rehabilitation, preservation and utilization of historic buildings which are representative examples of the County's heritage.

IMPLEMENTATION. Policies HA-a should be implemented by the Tehama County Historical Commission. Nominations of significant historic or prehistoric resources for protection under federal or state legislation (Policy HA-b) shall be made by the Tehama County Board of Supervisors based on the suggestion of historic/prehistoric interest organizations or experts such as the County Historical Commission, the Tehama County Genealogical and Historical Society, Tehama County Museum Foundation, archaeologists representing the Bureau of Land Management or National Forests Service, or the Society for California Archaeology.

Policy HA-c shall be encouraged by the Board of Supervisors and may be implemented by the Tehama County Historical Commission, the Parks and Recreation Commission, the Society of California Archaeology, and the Bureau of Land Management.

Implementation of policy HA-d shall be the responsibility of the Tehama County Planning Department via CEQA procedures. Information on surveyed areas shall be maintained by the County Planning Department. Specific locations of unprotected sites shall be retained as confidential information to avoid vandalism, loss or

destruction of the County's historic or prehistoric record. Methods of preservation shall be determined on a case-by-case basis.

ENVIRONMENTAL IMPACTS. Development in areas of Tehama County supporting significant archaeological or historic sites may result in damage or loss of these resources. Although not proposed by the General Plan, construction of the Thomas-Newville and Cottonwood Creek Water Projects would preclude future archaeological investigations of these sites. Policies contained in this element propose measures to mitigate adverse impacts, such as site review by qualified professionals and nomination for protection under state or federal legislation.

Community Development Group

The Community Development Group of the Revised General Plan contains five elements: Development Pattern and Community Organization; Circulation; Housing; Water Supply; Wastewater Treatment, and Solid Waste Disposal; and Schools, Libraries and Recreation Facilities. As a group, these elements answer questions concerning the quantity, locational distribution and the implications of future population growth and development. The relationship between population growth and the consumption of natural and man-made resources is a key concern and an important reason for the General Plan's revision. The Community Development Group translates population growth projected to occur during the 1982-2000 planning period into a development pattern that best accommodates this growth. Implicit in the development pattern is its associated requirements for natural resources such as land and water for domestic and agricultural use. Of equal importance, the plan must address questions concerning the man-made resources required to support both existing and future residential, commercial, industrial, and agricultural land uses. Man-made resources include the requirements for appropriate wastewater treatment and disposal technology, solid waste disposal, new road construction and continuing road maintenance, schools and schoolbus fleet maintenance, and libraries and recreation facilities. In considering these questions, the Community Development Group takes a Countywide perspective to identify the best opportunities to accommodate growth, having minimal impacts on Tehama's natural, man-made, and fiscal resource base. At the same time, the plan recognizes the individual and distinct character of each community and establishes land use patterns responsive to the scale and lifestyle Tehama's citizens enjoy.

In answering these questions, the Community Development Group of the plan represents a statement of Tehama County's commitment to accommodate future population growth within a framework of established goals and objectives.

Goals and objectives find their expression in policies that relate to the categorical use of land. The Community Development Group establishes categories for residential, commercial, and industrial land use. In this way, the County's general plan goals and objectives are implemented by permitting land uses that are consistent with the plan goals and consistent with one another.

DEVELOPMENT PATTERN AND COMMUNITY ORGANIZATION

INTRODUCTION. The Development Pattern and Community Organization Element presents policies and standards that address the amount, location, distribution, density, and intensity of land uses based upon projections of associated land use needs. This element presents policies relating to community organization and relationships among different types of communities found in Tehama County, the living environments they afford, and the location of development over time within communities in order to enhance and maintain a variety of living environments. This element covers the major subject areas contained within the state mandated land use element, Government Code Section 65302(a), which is quoted below. Those subjects within the scope of the Development Pattern and Community Organization Element have been underlined. Footnotes refer the reader to those sections of the plan which address subjects not covered by this element. Government Code Section 65302(a) provides:

A land use element which designates the proposed general distribution and general location and extent of the uses of the land for housing, business, industry, open space, including agriculture, natural resources, recreation, and enjoyment of scenic beauty, education, public buildings and grounds, solid and liquid waste disposal facilities, and other categories of public and private uses of land. The land use element shall include a statement of the standards of population density and building intensity recommended for the various districts and other territory covered by the plan. The land use element shall also identify areas covered by the plan which are subject to flooding and shall be reviewed annually with respect to such areas.¹

In addition to these areas, Government Code Section 65303(k) requires, and the element provides, that land be used over time in order to accommodate projected population and employment growth within a defined community development pattern which is rationally related to the necessary public services and facilities.

As identified above, the scope of the Development Pattern and Community Organization Element comprehensively covers a variety of interrelated areas of fundamental importance to the Tehama County General Plan. This importance should not obscure the fact that its objectives and policies must be understood within the context of all plan elements.

DEVELOPMENT PATTERN

FINDINGS. Prior to presenting findings on development pattern, it is important that the term "development" be defined. As used in the General Plan, "development" means the actual use or commitment of land for the construction of houses, commercial and industrial structures, public service facilities, and related structures, thereby accommodating population growth and associated employment

¹ See Resources Group.

² See Public Safety Group.

growth within Tehama County. Implicit in this definition of development is the commitment of land to a particular residential, commercial, industrial, or public service use so that any other use of the land is precluded for at least the foreseeable future and would require major redevelopment. Under this definition, lands used for agriculture, timber production, and open space are not considered as developed. Also, development does not mean the parcelization or subdivision of land into homesites which may at some future date be provided with services and built on. This distinction is important because the mere creation of homesites does not accommodate growth. While there has been and will continue to be a demand for rural homesites or lots to provide investment opportunities, the actual accommodation of some portion of future County population growth will occur only by development which creates lots, provides services to them, and builds the required structures and facilities.

Existing Development Patterns. Land use patterns are shaped by how a community permits its lands to be used. Tehama County's future development pattern has already been significantly shaped by past land use plans and regulations. The future pattern of land use development in Tehama County will in large part reflect the existing pattern of land use and existing organization of communities.

Tehama County's existing land use pattern has evolved overtime and is comprised of several focused population centers found in the greater Sacramento River Valley. The incorporated urban centers of Red Bluff, Corning and Tehama are situated adjacent to the transportation corridor defined by Interstate 5, the Southern Pacific Railroad, and the Sacramento River.

Allied with these population centers are areas experiencing more recent secondary population growth. The population of these may equal or, in the case of Los Molinos, surpass their adjacent companion communities. By way of example, the suburban areas identified as Antelope Valley and Surrey Village and the greater Red Bluff "Northwest" area reflect this type of secondary growth which has developed from the original population center, Red Bluff.

North of Red Bluff the rural communities of Bend and Bowman occur as more isolated population areas. Residents of these communities may either commute out to work, work the agricultural resources of the surrounding land, or do some combination of both. Further north, the large freestanding, unincorporated community of Lake California differs significantly from Bend and Bowman in terms of its density, available water and wastewater treatment services, and the ultimate lifestyle it will afford residents upon buildout. In short, Lake California has the basic services and densities that most closely match a more urban environment.

South of Red Bluff along the Sacramento River Valley occur several small and relatively compact rural centers which, as the name implies, function to provide services to the predominantly rural agricultural lands surrounding them. The rural service centers of Dairyville, Proberta, Gerber, Richfield, and Vina have grown at a scale and to a size indicative of the predominantly agricultural resource base that supports these communities.

The above description defines the development pattern of the Sacramento River Valley and the immediate I-5 corridor. Moving east or west of the central area one finds a development pattern shaped by limited road access, increasing slope,

extensive public land holdings, fewer man-made resources and services, and greater climatic extremes. In the western region of the County the rural service centers of Flournoy and Paskenta provide limited services to a sparsely settled surrounding landscape devoted to grazing and timber production. Also, anomalous to the western region is the large free-standing subdivision of Rancho Tehama, characterized by its many suburban-sized lots, limited buildout, and minimal provision of services.

In the eastern region, development takes the form of limited agriculture, grazing and timber operations with small rural communities and individual homesites dispersed throughout the area. The rural communities of Manton and Mineral provide for both residential and recreation-related living environments.

Also found along Highway 36E are the rural communities of Paynes Creek and Ponderosa Sky Ranch. Both communities, together with the small area to the north of Ponderosa Sky Ranch bounded by Canyon View Loop and Highway 36E, afford residents a rural lifestyle with a limited level of basic services.

The Countywide existing development pattern described above reflects itself in the acreage categories for existing landownership/land use identified in Table CO-1. Roughly 27% of all lands are held by Federal, State and County governments, with these holdings mainly confined to the extreme eastern and western portions of Tehama County. Fully 58% of all Tehama County lands are committed to some form of cultivation or animal production. Thirteen percent of all County lands are committed to the production and management of timber resources, and a small portion, 2.1%, is classified as undeveloped, not used for agriculture or timber production. Of interest to note is that a mere .8% of the total Tehama County land base can be described as "developed."

Land Use Demand and Supply. Future Demand for Developable Land. Population projections developed as part of the Tehama County General Plan revision program estimate a year 2000 population of between 59,000 and 75,000 persons, compared with a 1982 population of 41,120. The two population projections encompass a reasonable range of likely population and employment growth trends during the 1982-2000 planning period. A full documentation of the methodology used to derive population and employment projections is contained in Technical Report #2 of the General Plan's Appendix. Estimates of the future demand for land to accommodate the projected employment and population growth were developed by converting these projections into acres of land. Acreage requirements were developed using the high employment and population projection. These requirements which are presented in Table CO-2, represent additional acres of land needed to accommodate the projected population resulting in a year 2000 population of 75,000.

Developable Land Supply. As part of the General Plan Revision Program, a detailed analysis of the development capability of Tehama County's undeveloped privately-owned land was conducted as shown schematically in Figure CO-1. Privately-owned lands were analyzed according to their hazard constraints (e.g. fire, flooding, steep slopes), natural resource values (e.g. agriculture, timber) and public service capabilities (e.g. road access) and assigned a relative development suitability rating of low, moderate, or high. Technical Report #3 of the Plan's Appendix presents the results and the methodology used in this determination. The analysis identified lands suitable for the accommodation of future residential, commercial,

and industrial development. As is shown by Table C0-3, the developable land supply is more than adequate to accommodate the population growth and its concurrent residential and employment land use requirements as projected for the next 20 years.

It is important to note that the major portion of lands having a high suitability to accommodate growth are located in the North I-5 planning area. The remaining planning areas have limited amounts of high suitability growth accommodating lands because of their agricultural resource values or, in the case of the Eastern and Western Planning areas, because of their steep slopes, limited road access and limited public facilities and services.

The development suitability analysis represents an objective and mechanical approach to determining lands which ~~should~~ could be developed given available County public resources. However, it is very important to understand that the determination of lands which ~~should~~ be developed focuses on the availability of basic primary services such as roads, water supply, and wastewater treatment facilities, which are required for all types of development. To establish a future development pattern that fails to address this aspect of development suitability would, over time, entail substantial private and public costs.

Alternative Development Patterns. The relationship between Tehama County's land supply and projected demand for land during the 1982-2000 planning period was evaluated with regard to three major development patterns. Each pattern evaluated the supply/demand land requirements in terms of various assumptions concerning the rate and distribution of population growth as well as the resource and economic implications of each alternative. Also, each pattern was evaluated for its conformance with the preliminary planning objectives which are now contained in the General Plan in final form. Alternative #1 represented a "no plan" alternative and projected existing growth patterns into the future. The "no plan" alternative continues the current mix of rural and suburban size lots and the current housing typemix. The significant implication of the "no plan" alternative was its consumptive use of valuable agricultural lands in the Central and South I-5 planning areas.

Alternative #2 concentrated a major portion of future population growth in and around existing incorporated cities, away from valuable agricultural lands. This alternative continued the current housing type mix found in the County, but shifted to small lots that consume less land.

Alternative #3 established a number of new small communities in the North I-5 planning area and focused additional growth within existing community centers. A new community as outlined in Alternative #3 would require community water supply and wastewater treatment facilities. As a practical matter, the latter facilities would need to discharge effluent to the Sacramento River. There did not appear to be available sites along the Sacramento River to accommodate new communities without excluding such objectives as the preservation of agricultural lands, grazing lands and the protection of watercourses.

A full documentation of the analysis and evaluation of the alternatives is presented in Technical Report #4 of the Plan's Technical Appendix. On the basis of this evaluation, a modified version of Alternative #2 was found to

be most in conformance with the objectives of the General Plan. The recommended alternative differed from Alternative #2 with respect to the distribution of population among each of the five planning areas, with respect to the distribution of lot sizes among urban, suburban and rural lots, and in terms of the growth potential of the County's numerous rural community centers and rural service centers. Specifically, the modifications to Alternative #2 included the following modifications.

The North I-5 area will capture roughly 70% of the population growth projected to occur in Tehama County during the planning period 1982-2000. By the year 2000, the North I-5 planning area will contain 62% of the County's population--today it contains about 55%. This represents a major shift of growth out of the Central I-5 planning area in order to preserve the agricultural resources of that area. The Central I-5 planning area will receive 4% of the projected growth and by the year 2000 contain 9.3% of the County's total population--today it contains 14%. The South I-5 area will receive 23% of projected growth and, on a percentage basis, will maintain its current share of Tehama's total population. The Eastern and Western planning areas will receive, respectively, 2 and 1% of the projected growth. The Eastern area will maintain its current percentage of the County's total population and the Western will decrease its share to about 2%.

The second major modification concerns the residential lot distribution among urban, suburban, and rural size lots. Of the 15,000 residential lots which will be necessary to meet projected population growth, the percentage of rural lots would increase from 8%, as provided under Alternative #2, to 13% under the recommended alternative. This is slightly less than the 15% identified in the "no-plan" or trends alternative (#1). Important to note is the fact that the majority of these lots will occur in the North I-5 planning area in order to reduce the consumption of agricultural lands in the Central and South I-5 areas. Also, the rural lots identified in the recommended alternative are intended to be used as homesites to accommodate population growth, rather than for investment purposes.

The third modification addresses the growth potential of the County's rural service centers and rural communities. Rural service centers contain a small number of select or convenience type services, usually small markets, restaurants/bars, and agricultural supply store, and primarily serve the surrounding low density rural residential development. The following are classified as rural service centers: Dairyville, Proberta, Gerber, Richfield, Vina, Flournoy, and Paskenta. These service centers are characterized as experiencing limited opportunities for growth due to either natural resource limitations or natural hazards.

Rural communities, as their name implies, provide limited services to predominantly rural areas. Most residents commute out of these communities for employment. Rural residential communities may be fairly well defined, such as Bend, Manton, Paynes Creek, Ponderosa Sky Ranch and Mineral, or they may be dispersed as in the case of the Bowman area. Limited additional growth will be accommodated by rural residential communities based on the natural resources and hazard constraints.

General Plan Development Pattern. The development pattern or land use plan contained in the General Plan is a refinement of an alternative pattern examined during the planning process. Overall, this development pattern will accommodate, at a minimum, the land use requirements for housing and employment shown earlier in Table CO-2. As was noted earlier, these requirements will accommodate a year 2000 County population of 75,000 persons. The development pattern is said to accommodate 75,000 persons - "at a minimum" - because it reflects a land supply in excess of the actual acreage requirements shown in Table CO-2. This was found necessary in order to recognize pre-existing commitments and existing subdivided but "undeveloped" acreage and in order to lay out a coherent land use pattern. This is particularly true in the North I-5 planning area where extensive portions of the northwestern area have been subdivided and await future development of residences.

Table CO-4 quantifies the acres of vacant, unincorporated lands available for future housing and employment growth, as these acreages are actually shown on the General Plan maps. These acreages are categorized using several land use designations which are briefly described below. Using the assumptions on residential lot size¹ and persons per dwelling unit² listed below in footnotes, this table indicates that the inventory of developable residential lands could accommodate approximately 52,300 additional persons on lands which are now unincorporated.

In addition to growth accommodation in the unincorporated area of the County, a certain portion of the growth projected for the County during the planning period will occur within the incorporated areas on lands bypassed by earlier development. This process is frequently referred to as "in-filling." Table CO-5 shows the residential in-fill potential of the three incorporated areas of the County - Red Bluff, Tehama, and Corning. Assuming 100% utilization of this potential, the three cities could accommodate a total population of 27,188 persons. However, as a practical matter, only some portion of this in-fill potential will be utilized during the planning period.

The essential point of the above discussion is that the General Plan supplies an inventory of developable residential land substantially in excess of that required to accommodate the growth resulting in a year 2000 population of 75,000. As noted previously, land supply exceeds demand in part due to pre-existing land use commitments and in part in an attempt to show a coherent, rational development pattern. The practical implication of this land supply is that it will not need to be increased for at least the next decade and possibly longer. In any event, the rate at which this land supply is absorbed will be carefully monitored by the Planning Department in the unlikely event that this supply does require supplementing in the near future.

Land Use Categories. The development pattern of the General Plan is expressed geographically as well as quantitatively. In the latter case this is accomplished

¹Residential lot sizes in gross acres:

- Urban - 5 dwelling units/acre
- Suburban - 2 dwelling units/acre
- Rural Small-Lot - .3 dwelling units/acre
- Rural Large-Lot - .1 dwelling units/acre

²Persons per dwelling unit is 2.5, which is 1980 County average according to U.S. Census.

by mapping land use designations falling into three general categories:

- residential
- commercial
- industrial

Each general category comprises several land use designations, each of which in turn represents a definite statement of land use policy. These designations, and their accompanying policies, are completely described in Tables C0-9,10, and 11 contained in the policies section of this element. The following discussion briefly addresses each land use designation, notes why it was developed, and highlights its major policy features.

The residential land use category includes four subcategories: urban, suburban, rural residential small lot, and rural residential large lot. Each provides living environments having varying levels of services, densities of housing units, and a variety of housing types. The urban residential sub-category is designed to accommodate housing types ranging from 2 to 3 story multifamily structures to the traditional single family detached unit on lots from 5,000 square feet, all of which would meet applicable Land Division Standards.

Suburban residential provides living environments in close proximity to urban areas which may receive all urban services. Permitted housing types include single family detached and single family semi-detached, with single family attached and multifamily attached housing types permitted subject to discretionary review. Single family lot sizes would range from 10,500 square feet.

The rural residential small lot designation is provided in recognition of the rural character of many communities within Tehama County. Single family detached units would be permitted uses with single family semi-detached housing permitted subject to a review and determination of their compatibility within a particular area. Lot sizes within the 2 acre and above range are afforded the subcategory and provide for a living environment receiving no or only limited urban services.

The rural residential large lot subcategory will provide living environments receiving no urban services and located in areas of the County characterized by one or more of the following conditions:

- proximity to lands categorized as timber, grazing or croplands;
- uncertain long-term availability of water;
- remoteness from rural service centers, rural communities;
- severe limitations on septic tank use; and
- inaccessibility via County-maintained roads

The development of this subcategory reflects the relatively isolated nature of these parcels, as well as their inaccessible locations making service provision extremely difficult. Single family detached units on a minimum 10-acre parcel are permitted.

Three commercial land uses have been established to meet the County's need for retail establishments and assorted personal services. These include:

- local convenience center
- general commercial
- commercial recreation

Each commercial use provides for the varying needs of surrounding residential development. Locational requirements for each commercial activity have been developed based upon the market area and population density necessary to support a specific economic activity and with consideration to predominate land uses in the area.

The size and scale for each commercial activity relates fundamentally to the community types found in Tehama County. This is necessary to insure compatibility with surrounding land uses and to preserve the rural lifestyle indicative of rural service centers and rural community centers throughout the County.

Two categories of industrial land uses have been established based upon location characteristics:

- general industrial
- industrial park

Each industrial land use has specific site planning requirements which the plan accommodates. Rail-served industrial land use designations have been located adjacent to Southern Pacific rail-served land to facilitate access to this transportation resource. Similarly, general industrial and industrial park designations near major circulation routes and population centers are provided to put jobs close to population centers, available labor markets, and major freeway interchange points.

The General Plan development pattern is quantitatively shown in Table C0-4 and graphically presented in the land use maps attached to the Plan. The following discussion addresses the development pattern for each planning area.

North I-5 Planning Area. The development pattern for this area reflects its role as accommodating a significant portion of the growth projected for the County. Also reflected in this plan is its lesser role, compared to the Central and South I-5 planning areas, as a center of crop production. Growth within the planning area will be primarily accommodated in the following areas - City of Red Bluff, Lake California, and the Bowman Area, each of which is discussed below.

During the period 1982-2000, the development pattern shows major expansion of Red Bluff to the west and to the northwest. Westward expansion is shown at suburban densities reflecting continuation of the existing development pattern. This suburban development is located generally to the south of Reeds Creek Road to take advantage of existing road access provided by Walnut Street and Reeds Creek Road, classified as arterials, and Wilder, Live Oak, and Red Bank Roads, classified as major collectors.

Much of this suburban expansion area is currently under Williamson Act contracts. These agricultural uses would be gradually phased out during the planning period to accommodate suburban growth. Surrounding this suburban expansion area is a

growth reserve area intended to accommodate suburban growth beyond the year 2000. The northern boundary of this growth reserve is Pine Creek, which provides a definitive edge separating the growth reserve from adjacent grazing lands.

A portion of the northwest expansion area is classified as suburban residential and urban residential and is bounded by Route 36 to the north, Baker Road to the west, Monroe Avenue to the east, and the city limits to the south. Designation as urban residential reflects this area's relatively high development suitability, proximity to Interstate 5 and State Route 36, and relationship to the future service boundary of the Red Bluff wastewater treatment system. A future growth reserve area is located to the west of this expansion area and to the south of Route 36.

The remainder of the northwest expansion area is located north of Route 36 between the recently annexed Wilcox subdivision and McCoy Road. This area is classified as suburban residential.

In addition to these major expansion areas to the west and northwest, additional growth in the vicinity of Red Bluff will be accommodated within areas which have already experienced some development. These areas are the Antelope Valley, Wilcox Road, and Surrey Village, all of which are designated as suburban residential. The limits of suburban development in the Antelope Valley are drawn to respect and maintain the major croplands. Especially important in this regard is prohibiting residential development in the croplands located in the south of Antelope Boulevard (Route 36). Blue Tent Creek defines the northeastern boundary of the Wilcox Road area. Surrey Village is limited to its existing subdivided areas.

Major industrial areas are shown to the southeast of Red Bluff along the transportation corridor defined by the Southern Pacific Railroad and Interstate 5.

A limited amount of the County growth at urban densities will be accommodated by the unincorporated community of Lake California, which is served by its own water supply, wastewater treatment, and fire protection districts. Access to this community is provided by Lake California Drive, presently a two lane road. At some future time as this community approaches its planned build-out, this road will require upgrading to a four lane major collector. This improvement will most likely be financed in all or part by some type of assessment district.

The Bowman Area has in recent years experienced substantial residential development at low densities on scattered lots located adjacent to Bowman Road and Hooker Creek Road. It is anticipated that this development will continue in the future because this area provides a rural living environment which has ready access via Interstate 5 to urban employment opportunities in Shasta and Tehama Counties. Continued scattered development will create and intensify problems in providing this area with an adequate circulation system, fire protection, law enforcement, educational services, and commercial services.

The plan for the Bowman Area addresses these problems by showing a pattern of rural residential-small lot development focused generally within a triangle formed by the intersection of Bowman and Hooker Creek Roads. These roads are designated as arterials and linked by two proposed major collectors. One collector, Oakridge Estate Drive, will be extended to join with Saddleback Ridge, then run east and connect with Hooker Creek Road.

The Bowman Area would be affected by the proposed construction of two reservoirs -- the Dutch Gulch Reservoir along the Shasta-Tehama County border (north fork of Cottonwood Creek) and Lake Tehama along the south fork of Cottonwood Creek. Construction of the latter reservoir would require the realignment of Bowman Road. Depending on whether these reservoirs are used for recreation purposes and the degree of recreation use, the Bowman Area could be significantly impacted by tourist recreation traffic and pressures for second home and commercial recreation development. These pressures would likely result in increased demand to subdivide existing grazing and croplands in the area to accommodate residential and commercial development. Such development, combined with its service demands, could substantially alter the existing character of the Bowman Area.

The development pattern for the North I-5 planning area provides for the maintenance of the status quo in the community of Bend. Existing croplands would be maintained and residential development limited to rural residential-small lot.

Located throughout the North I-5 planning area to the west of Interstate 5 and to the north of Red Bluff are several large subdivisions generally characterized by 10 acre or larger lots and served by gravel roads. Created primarily to provide investment opportunities for out-of-area residents, these subdivisions have experienced and are expected to continue to experience a low rate of build-out due to their relative isolation and difficulties in providing services. These subdivisions are classified as rural residential-large lot.

The dominant land use of the remainder of the North I-5 planning area is grazing lands. Some of the more valuable grazing lands are located in the northern half of the planning area to the east and west of Interstate 5. In addition to their agriculture function, grazing lands in this planning area provide an important open space resource. Where these lands are located adjacent to Red Bluff, they have been used to structure the development of urban and suburban areas and to provide their residents with visual access to the natural environment.

The plan for the North I-5 planning area also recognizes the importance of the Sacramento River and major creeks as habitat areas, drainage courses, visual amenities, and recreation resources.

Central I-5 Planning Area. The plan for this area reflects the need to preserve its highly valuable soil resources. Future urban residential and commercial development would be contained within the existing community boundaries of Probertya, Gerber and Los Molinos. Future suburban and rural residential growth would locate to the north and south of Los Molinos based on a density gradient concept. This growth pattern concept involves an urban core (Los Molinos) with an associated community center commercial district. Surrounding this would be a suburban region, extending from the community boundary north to Mill Creek (North Fork) and south to Sherman Street. The eastern boundary would run along Tehama-Vina Road and Shasta Blvd. The suburban area would be bordered on the west by the Sacramento River. Surrounding this suburban area, would be a smaller area of rural residential small-lot development which would run from Mill Creek north to approximately Third Avenue and is bordered on the east and west by Shasta Boulevard and the Sacramento River, respectively. The rural residential area would be bounded by crop and grazing lands to the north, thereby precluding additional residential development in this area. Rural residential small lot land use is also provided east and southeast of Los Molinos in order to address the sheetflow flooding problems in this area. The lower density rural residential small lot allows better site planning opportunity in order to mitigate flooding hazards in this area.

The rationale for this plan is based on the predominance of highly valuable agricultural soils, many of which have been identified as prime or of state-wide importance and which currently support some of the most productive orchard crops in Tehama County. Many of these lands are under Williamson Act contracts. The productivity of these soils is largely due to their proximity to the Sacramento River. In addition to the value of these soils for agricultural purposes, many lands along the river provide habitats for a wide variety of wildlife. Two Great Heron rookeries, a Yellow-billed cuckoo nesting site and critical riparian habitat zones are among the wildlife found in this planning area; they have been placed under the Resource Management land use category for their protection and maintenance.

Planned growth in the Los Molinos area will require construction of a sewage treatment facility to adequately serve expanded development. Current residents depend on septic tank/leachfield systems for wastewater treatment, although it is generally agreed that such systems are not advisable as populations become concentrated.

Water supplies are presently provided by individual wells and a small number of private water systems. Future growth in this area will require consolidation and/or expansion of existing systems in order to adequately meet future water demands once systems capacities are exceeded.

Road access within the Central I-5 is provided by four major north-south roads: Highways 99E and 99W, San Benito Avenue and Interstate 5. East-west travel is provided by several major and minor collectors as well as smaller local roads. As the Los Molinos region grows, roads serving this area need to be upgraded in order to maintain traffic safety and efficiency. The Circulation Element presents a full analysis for this area.

As identified in the plan, most land uses in the remaining portions of the Central I-5 area would be designated as grazing and croplands. Some rural small lot development would occur west of Interstate 5 to Rawson Road between Las Flores and Rawson Avenue. This designation reflects the current parcelization and development pattern in this area.

South I-5 Planning Area. The South I-5 planning area contains the City of Corning, the unincorporated rural service centers of Richfield and Vina, and many individual residences strung along the planning area's local roads. Together, the residential areas have a population of approximately 9,730 persons.

As identified in the plan, the predominant land use in this planning area is agriculture. Croplands extend along the length of the Sacramento River and cover extensive portions of the planning area. Vina and Richfield are ringed by cropland, and the City of Corning is bounded to the north and south by croplands.

Grazing lands occur toward the periphery of the planning area and as one large block in the center of the South I-5 area. Additional lands having resource value include sites of mineral extraction along Thomes Creek and the riparian and habitat resources along the Sacramento River.

Most of the population growth projected to occur in this planning area will be accommodated within the City of Corning and in the area directly east towards the Sacramento River. In the latter case, a linear band of urban land has been established

from the city boundary, east along Hoag Road. An outer band of suburban development would radiate to the north and south from this linear urban band in order to provide a density-transition buffer for the croplands to the south. Additional suburban residential land has been established as a narrow strip along the southern border of the existing Corning city boundary and along the northeastern city limits.

The rationale for this development pattern is twofold. First, there exists the availability of a large supply of land suitable for accommodating growth east of the city. Equally important, this pattern would act to direct growth away from lands of prime agricultural value. It should, however, be noted that there will be some existing grazing land preempted by development. Additional grazing lands have been placed in a growth reserve category that allows for the continuation of grazing activities until such time that population growth requires that they be utilized to accommodate development.

A second rationale relates to the future provision of services in the planning area. Corning is currently in the process of upgrading its sewage treatment capacity to accommodate, at a minimum, a population increase of 700 persons. Larger sewer lines will run from Corning east to the Sacramento River for treatment and disposal. The General Plan's development pattern generally complements this directional pattern.

It is important at this time to understand the implication of this growth pattern to the future boundary of Corning. Simply stated, Corning's city boundary should eventually coincide with the growth pattern shown on the General Plan. As an initial step, the "sphere of influence" for the city should be established to reflect the easterly direction of the growth patterns. A sphere of influence implies a recognition on both the part of Corning and County government that this area is best suited to accommodate future growth and development and that future expansion of Corning would likely occur within the established influence sphere.

In terms of available domestic water supplies for future growth, it is reported that the only expansion limitation on Corning's existing water system is fiscal in nature. That is, groundwater is readily available from the Upper Sacramento Groundwater Basin, and new growth may be accommodated, provided an appropriate fee structure is established to pay for new development hook-ups.

The remainder of the planning area, including the rural service centers of Vina and Richfield, is served by individual septic tank/leachfield systems or seepage pits.

In addition to lands designated as urban and suburban, two areas are designated rural residential small-lot. These are the rural service centers of Richfield and Vina. For the most part, these two areas will experience limited growth and in-fill and will continue to function as agricultural support centers for surrounding croplands.

Industrial land use has been established adjacent to the Southern Pacific line north of Corning. This is intended to provide rail-served industrial lands and a potential industrial park in association with the Corning Municipal Airport. These lands are also located in proximity to Interstate 5 via the Finnel Avenue interchange.

Just as road and rail access play an important role in identifying viable industrial lands, a circulation system must be integrated with and complement the established

land use pattern. The South I-5 planning area is served with three major north-south transportation routes. Interstate 5 provides a high speed, limited access circulation corridor that conveys people and goods within and through Tehama County. Highways 99E and 99W also serve the South I-5 planning area, but at substantially lower traffic volumes and speeds. These highways commonly provide for the shorter north-south trips and often accommodate the transport of farm equipment within the planning area.

Arterial level roads such as Hoag, South Avenue, and Kirkwood function primarily to serve the immediate planning area, transporting people from outlying residences into Corning.

The lowest level of roads shown on the General Plan are major collectors. Hall, Marguerite Avenue, Olive, and Richfield River Road provide local residents with access to the higher level arterial roads. Generally, these collector roads provide for low speed and low volume traffic and are not structurally engineered for greater volumes and speeds.

Eastern Planning Area. The Eastern Planning Area of Tehama County is characterized by large tracts of public land, land under timber preserve contracts, and areas utilized for grazing purposes. The latter are concentrated in the low lying regions adjacent to the valley area, while public and timber lands are located in higher country to the east.

Existing development in this region is minimal, with populations concentrated in small rural communities such as Manton, Mineral, Paynes Creek, and Ponderosa Sky Ranch.

Highways 36E, 89 and 32 and Manton Road are the major roadways which serve the Eastern Planning Area. Numerous small roads also serve the area, yet these are generally gravel roads which traverse fairly rugged terrain.

The General Plan for the Eastern Planning Area projects the need to accommodate additional rural residential development during the 1982-2000 planning period. Most of this growth has been directed to the existing communities. This recommendation reflects limited public resources for circulation system improvement and maintenance, restricted water resources, and poor soil conditions which limit the feasibility of on-site wastewater treatment facilities.

Tehama County presently maintains a wastewater collection and treatment plant in the Mineral area; however it can accommodate only limited additional effluent. As the Eastern Planning Area is located outside of the Upper Sacramento River Groundwater Basin, the amount of available groundwater is undetermined. Furthermore, as surface flows are fully allocated to the Central Valley Project, Western County residents must depend on riparian and/or appropriative rights and storage facilities for their water supplies.

The existing circulation pattern will be able to accommodate the increase in traffic generated by future growth. No new roads have been proposed in recognition of severe topographic constraints and associated public service costs, yet existing roads, particularly gravel roads, will require upgrading over time to maintain traffic safety and efficiency.

Future development would also be possible in the open space areas of this region, yet would be subject to development standards reflecting parcel specific conditions such as road access, water and wastewater availability/treatment potential, and proximity to natural resource areas. In most instances, development on open space would require a 40 acre minimum parcel.

Western Planning Area. As is the case in the Eastern Planning Area, the Western Planning Area of Tehama County also supports large land areas held in public ownership, timber preserve and lands utilized for grazing purposes. The main roads serving this region are Highway 36, Reeds Creek Road, Paskenta, Black Butte, and Corning Roads. These roads provide access to the I-5 planning areas from most rural communities of the Western Planning Area. Many portions of this planning area, however, lack adequate road access or are served by roads of poor quality.

The sources of most agricultural and domestic water supplies are individual groundwater wells. The location and quality of these resources is difficult to predict. Although the proposed Lake Tehama Reservoir will be located in this planning area, high water costs may make the use of this water uneconomical for both domestic and agricultural users. Two additional reservoirs - the Dutch Gulch Reservoir along the Shasta-Tehama County border and the Thomas-Newville Reservoir in the southern area- have been proposed for the Western Planning Area. While construction of these projects has not yet begun, it is anticipated that all will be completed by the end of the planning period and would consequently preempt the land uses designated in the General Plan.

Wastewater treatment in the Western Planning Area is handled by individual septic tanks in conjunction with leachfield or seepage pit systems. The U.S. Soil Conservation Service has rated most of this region as severely limited for septic use which, in combination with present land uses, ownership pattern, resource value, road access/quality and water availability, limits the developable land supply in this region.

The General Plan designates that the community of Paskenta accommodate suburban densities. The Rancho Tehama subdivision would continue to develop at suburban densities. Additionally, Paskenta and Flournoy have been designated as rural service centers in recognition of their locations and the services they provide to nearby grazing operations. These centers would provide agricultural support services, and the plan map shows this designation via a generalized commercial symbol.

Growth Monitoring. As previously noted, the General Plan development pattern is based on a population of 75,000 by the year 2000. It is entirely possible that the growth which Tehama County will experience during the next twenty years may in fact fall short or exceed this projection. It is for this reason that the growth projection should be viewed not as a static end point, but as a growth target. As discussed in the General Plan Preface, periodic plan review and adjustment will be required in order to respond to events both internal and external to the County influencing the demand and consumption of Tehama County's land supply. Depending upon the rate at which this inventory has been consumed during the interim between plan reviews, more or less undeveloped lands which were previously not classified as residential, commercial, or industrial will have to be reclassified in order to replenish this inventory. It is within this review process that the Plan's development pattern continues to find its expression. It follows

that the Development Pattern and Community Organization Element must contain policies requiring both the periodic review of growth targets in order to measure their conformance with actual growth and, based on this review, the revision of these targets in a manner consistent with the objectives of the General Plan. Since the Plan takes a long-term view of the development pattern, the revision of the growth targets should maintain a supply of land capable of accommodating at least the growth anticipated for the twenty year period commencing with the date of revision.

Development Pattern and Provision of Services. Since the passage of Proposition 13, a major planning issue facing local governments has been the public costs associated with providing services to various types of residential development and how these costs relate to the tax revenues generated by different development types. In defining the terms of this issue for Tehama County, the services of concern are:

- water supply
- wastewater treatment
- solid waste disposal
- road access
- public education
- law enforcement
- fire protection

In the context of this issue, the spectrum of residential development types ranges from high density single and multifamily development, such as is found in Red Bluff, to very low density rural development characterized by isolated residences located on large lots.

There is no question that a greater variety and higher level of these services may be economically provided to residential developments at the higher density end of the spectrum by spreading their costs over a large number of users and achieving economies of scale. It is also well settled that one type of residential development is not inherently superior to another and should not therefore be encouraged while the other is discouraged.

The real issue in Tehama County is whether the residents of any particular development type are paying, through taxes, special assessments, or other revenues, the actual costs associated with the level of services they are provided. The converse of this issue is whether all or part of the service costs associated with particular development types are being subsidized by revenues generated by other development types.

This issue is of concern in the General Plan because of its direct effect on residential development and the provision of services. The following discussion examines this issue with respect to the services listed above. In order to facilitate this discussion, it focuses on the two ends of the spectrum - high density urban and low density rural development. The purpose of this discussion is to provide some insights as to how the General Plan should address the issue of service provision.

It is safe to conclude that each development type pays its own way with respect to water supply and wastewater treatment. In rural areas, these services are provided by on-site systems, the costs of which are borne by the property owner. Likewise

in urban areas, the property owner pays for these services by special assessment district or taxes.

Solid waste disposal presents a different situation. Currently Tehama County subsidizes the operation of solid waste collection and transfer stations in rural areas of the County by charging user fees which are not commensurate with their operating costs. At the other end of the scale, residents of urban areas receive solid waste collection service on a fee basis through a franchise service. This inequity has been recognized and would be eliminated by adoption of the following policy, recently proposed by the Board of Supervisors Solid Waste Committee:

The County of Tehama will move to a position of a zero solid waste subsidy in a timely, administratively and economically feasible manner over a 3 year period.¹

Adoption of this or a similar policy will place rural and urban development on an equal footing with respect to payment of the actual costs of service provided. Of course, solid waste collection and disposal will cost more per unit in rural areas because of higher transportation costs.

A situation similar to that of solid waste exists in the area of road access. Until recently, it was County policy to accept maintenance responsibility for private roads constructed to County standards, including roads serving low density rural development, after one year of maintenance by the entity constructing the road. Although the initial capital costs of a new road are substantial, they are relatively insignificant when compared to the long-term costs of maintaining a road. Recognizing this fact, in 1980 the Board of Supervisors adopted a policy that new roads would be taken into the County-maintained system only if they are "determined to be of interest to the general public."² As with the proposed policy on solid waste disposal, this road maintenance policy is designed to achieve an equitable relationship between the costs of providing a service and the taxes or fees paid by those provided with the service.

With one notable exception, the costs of public education are generally the same for all types of residential development. The exception relates to the per capita cost of busing students from the home to the school site. Examination of the transportation costs of the County's school districts, as presented in Table C0-6, shows that these per capita costs generally increase as the population density of the district decreases. These costs are funded by the individual school districts. It may be the case that in some districts parents whose children do not use school bus service are subsidizing part of the cost of transporting children who do use bus service. However, if these subsidies do occur, they are localized within the school district and likely to be inconsequential.

Law enforcement and fire protection are provided in the rural areas of the County by the County Sheriff and the Tehama County Rural Fire Department, respectively, while in the urban areas these services are provided by city governments. Comparative analysis of the costs of the level of these services provided to each development type as they relate to the amount paid for these services is extremely complex

¹Board of Supervisors Solid Waste Committee Memorandum of February 8, 1982.

²Policy for Accepting Roads into the County Maintained System, adopted by the Board of Supervisors, May 20, 1980.

and requires some subjective judgments on the assignment of costs. Accordingly, this analysis is not attempted here. All that can be safely said is that providing these services at urban levels to rural areas would require substantial government subsidies.

The major conclusion of the above analysis is that past inequities in the relationships of service costs to service payments have been or are in the process of being corrected in the areas of solid waste disposal and road access. Given the limited fiscal resources of local governments in California, residents of rural areas can expect close scrutiny of the costs of providing services to them and the elimination of any government subsidies.

The Development Pattern and Interjurisdictional Relations. The future urban/suburban residential development pattern described above will have major public service implications. All basic services will need to be provided at urban levels and can best be provided by a general purpose government agency receiving revenues from a variety of sources, including user fees as well as property taxes, and functionally equipped to provide this wide variety of services -- in short, a city. Accordingly, this development pattern assumes that unincorporated lands classified as urban and suburban adjacent to Red Bluff will ultimately be annexed by Red Bluff. Similarly, in the case of Los Molinos in the Central I-5 planning area and Corning in the South I-5 planning area, unincorporated urban/suburban lands will either be incorporated (in the case of Los Molinos) or annexed (in the case of Corning) in order to provide the services required to develop at these higher densities.

The accomplishment of the above task entails close city/county interjurisdictional planning and cooperation. California planning and zoning law does not mandate this approach, but experience and common sense strongly encourage joint planning through a three tier process. This process includes:

- defining the planning area,
- defining the nature of the planning interaction, and
- coordination of public works projects.

The following brief discussion distinguishes the different tiers. A general plan must include all territory within the boundaries of the adjoining city or county and any land outside its boundaries which bears relation to its planning.¹ With regard to a city, its planning area should extend beyond its incorporated limits to include unincorporated areas whose use and development will affect the city's plan. When a city exercises the authority to prezone unincorporated territory in anticipation of annexation², it must do so in conformance with a general plan for the prezoned area.

A county's general plan must cover incorporated as well as unincorporated territory. Since counties do not exercise land use regulatory authority over incorporated areas, planning for them is in the nature of providing a countywide framework for the growth and development of incorporated areas.

¹ Government Code, Section 65300.

² Government Code, Section 65859.

Special districts providing public facilities essential to the growth and maintenance of an urban population are authorized to prepare five-year capital improvement programs indicating the location, size, timing, and other aspects of proposed improvements. The planning area for such a program could include incorporated as well as unincorporated areas. While the law does not address this particular point, the planning area could extend beyond the boundaries of the special district's service area. While the provision of capital improvements exerts a strong influence on land use decisions, it is important to note that special districts are not empowered to exercise land use planning or regulatory authority.

The state planning and zoning law does not explicitly provide any mechanism for determining the planning area boundaries of cities, counties, and special districts. The Knox-Nisbet Act governing local agency formation commissions (LAFCO's) does, however, provide for the designation of "sphere of influence" areas which may function as planning areas. The term "sphere of influence" means a plan describing the probable ultimate boundaries and service areas of the governmental entity.¹ Some of the factors that should be considered in developing a sphere of influence are:

- The maximum possible service area of the agency.
- The range of services the agency is providing or could provide.
- Type of development occurring or planned for the area.
- Future service needs of the area.
- The level and adequacy of present services in the area.
- The interdependence and interaction between the service area and the area surrounding it.

Once developed, the spheres of influence are to be used as a prime factor in making regular decisions regarding proposals for development which are submitted.

In the case of a special district, its planning area and sphere of influence should probably be the same. A city, however, with its much broader functions and authority in land use planning and regulation, should have a planning area that at least includes its sphere of influence and even extends beyond to include areas in which it has a legitimate planning interest.

The state planning and zoning law clearly recognizes that the planning areas of cities, counties, and special districts will overlap to define areas of mutual concern. Accordingly, state law outlines the nature of the planning interaction among these agencies.

General plans or elements thereof proposed for adoption by cities should be referred to the county in which they are located for review and comment, and the county should do likewise for cities within its boundary.² Upon adoption of a plan or constituent elements by cities and a county as described, copies of the adopted plan should be exchanged and may be adopted by the receiving entity as part of its general plan.³ Five-year capital improvements programs prepared by a special dis-

¹ Government Code, Section 54774.

² Government Code, Sections 65305 and 65306.

³ Government Code, Section 65360.

trict must be referred for review to cities and counties within which the district operates.¹ The purpose of this review is to solicit comments regarding consistency with the applicable general plan.

State planning law also provides for the coordinated implementation of general plans through the construction of public works projects. Counties and cities may require school and special districts operating wholly or partially within their jurisdictions to submit lists of public works projects proposed for planning or construction during the ensuing fiscal year. These lists will be reviewed by the receiving agency and integrated into a coordinated public works program which shall be evaluated for conformity with the applicable general plan.² Cities, counties, and special districts may not undertake a public works project, including the acquisition and disposal of land, within unincorporated and incorporated territory until the project's consistency with the applicable general plan has been determined.³

The three tiered joint planning process described above has important implications for the realization of the General Plan's development pattern and for future cost-effective provisions of basic services. Specifically, the General Plan must contain policies requiring that annexation by Red Bluff and Corning precede the development of areas contiguous to them.

COMMUNITY ORGANIZATION

FINDINGS. Tehama County's lifestyle is in part due to the sum of its diverse communities, each of which serves a slightly different function. Each community's size, scale and character has changed slowly but continuously over the years in relation to changing demographic trends and the underlying economic base.

The various lifestyles afforded by these communities is an important reason people live in and move to Tehama County. The General Plan recognizes this variety by establishing land uses sensitive to the natural resources surrounding communities as well as to the availability of basic services, major transportation and circulation routes, and potential employment opportunities. Four levels of communities are recognized and provided for in the General Plan. They are:

- Urban Center (incorporated)
- Town Centers (unincorporated and incorporated)
- Rural Community Centers (unincorporated)
- Rural Service Centers (unincorporated)

Urban Centers. This type of community provides the full range of urban services within the boundary of an incorporated city. There are two urban centers in Tehama County: Red Bluff and Corning. Urban services include community water distribution systems and wastewater treatment, full-time police and fire service, public recreation facilities, schools, and emergency medical services. Urban centers function as a major employment and retail trade centers and have access to major transportation routes and rail lines. The Plan recognizes the function of urban centers by locating rail-served industrial land uses in proximity to Southern

¹ Government Code, Section 65403(c).

² Government Code, Section 65401.

³ Government Code, Section 65402 (b,c).

Pacific rail access points. Also, commercial land uses have been sited in areas where major residential growth is planned, thereby reducing trip lengths to meet commercial and service needs. Adjacent to Red Bluff, approximately 80 acres of general commercial is provided within the area roughly bounded by Baker Road on the east, Stoll Road to the north, the north-south power transmission lines on the west, and Brickyard Creek on the south. The commercial land use generally complements similar activities found in this area.

Overall residential living opportunities in an urban center would range from a single-family detached house on a large lot within a suburban type neighborhood to a multifamily 2-to-3 story apartment or condominium complex. In Tehama County, an urban neighborhood could be described as a contiguous developed area, with dwelling units on building sites which are served with sewer and water systems, including such features as streetlights, sidewalks, curbs, and gutters.

Town Centers. Town centers are similar to urban centers, with the primary distinction being that town centers are generally not incorporated areas. The City of Tehama is the exception to this distinction. There are three town centers in the County: Los Molinos, Lake California, and the City of Tehama.

Public services in town centers are provided by County Government or by special districts. The level of service available varies -- where Lake California has a wastewater treatment facility, residents of Los Molinos and Tehama rely on individual septic tank and leachfield systems. Generally, the level of service available in Town Centers is less than that found in urban centers. Services available may include a small community water system, schools, law enforcement via the Tehama County Sheriff and fire protection by a combination of full-time employees and volunteers.

Town centers function as secondary trade centers and contain commercial areas of smaller scale than typically found in urban centers. Lake California has planned commercial sites along River View Drive to serve the needs of future residents as the area builds out. The nature of residential development suggests that neighborhood center commercial would best serve the future needs of Lake California.

In Los Molinos, commercial land uses have been designated within the area roughly bounded by the Southern Pacific rail line in the west, Tehama-Vina Road to the north, Highway 99E to the east, and the intersection of Molinos Street and Highway 99E to the south. This triangular area is centrally located within an urban core of density and benefits from direct circulation from Highway 99E.

Residential neighborhoods would contain the same range of housing types found in urban centers; however, the scale of the built environment would be much lower and natural elements more prominent features of the landscape. This is particularly the case for Los Molinos and the City of Tehama, which are surrounded by agricultural lands and the immediate presence of the Sacramento River.

Rural Community Centers. Rural community centers provide few of the basic services normally associated with either Urban or Town Centers.

Available service levels approximate those found in the other unincorporated areas of the County, with wastewater treatment by individual septic tanks and water supplied by individual or shared wells. The exceptions to these cases are the com-

munities of Mineral, Manton, and Ponderosa Sky Ranch. Mineral has a small waste-water collection and treatment facility, Manton is supplied water from Digger Creek surface water flow, and Ponderosa Sky Ranch has a small community water system. These expectations are indicative of the marginal soil-septic suitability and ground-water availability of the Eastern Planning Area.

Rural community centers may contain schools and often require school bus service to transport resident children. Bend and Mineral school districts do not operate buses. Additional services include law enforcement by the County Sheriff and fire protection by Schedule C Stations manned by volunteer fire companies.

Commercial uses in rural community centers are small scale and provide a variety of services to local residents. Usually, these commercial uses are mixed with or are in close proximity to residential uses.

The land use plan indicates for the Bowman area that Local Convenience Center be located in the vicinity of Meeks Lane and Landes Road along Bowman Road. The existing commercial activity in this area and its central location provides an essential commercial activity center for the fast-growing Bowman area.

The Bend area's very small convenience center at the intersection of Jelleys Ferry Road and Bend Ferry Road provides for a few basic needs of the population in and around the Bend community. Until demand for additional commercial services increases, local residents will continue to drive into Red Bluff for major purchases.

Mineral and Manton similarly possess small commercial activity areas providing convenience commercial service to meet a part of resident population needs. The land use plan recognizes the small scale and unique natural environments surrounding these areas and identifies rural community mixed use centers in Mineral, within the area intersected by Highway 36E and Mineral Avenue, and in the vicinity of Shasta Street and Manton Road in Manton. Beyond these service levels, residents must drive into either Shingletown in Shasta County or to Red Bluff.

For the community of Paynes Creek, a small commercial convenience area at the intersection of Highway 36E and the western end of Paynes Creek Loop Road would provide a portion of the commercial needs for day-to-day goods. Similarly, the vicinity intersected by Ponderosa Way and Highway 36E would afford an area for commercial convenience activities. Limited commercial-related employment opportunities exist within these communities, with residents commuting out of these areas to their place of employment.

The natural, as opposed to the man-made or built, environment is the dominant theme in rural community centers and is one of the main features of their attractiveness. Access to the natural environment for recreational purposes is an important element of the daily life. The natural environment surrounding these centers also provides the resource base for agriculture, timber, and tourism.

With the exception of the Bowman area, limited amounts of additional population can be accommodated within these communities due, in large part, to the high resource value of the lands surrounding these areas. Access to timber, agricultural and recreation resources by industry and tourists can be thwarted as greater numbers of people locate in these areas. The more people located in these areas, the greater the potential conflicts between existing and future timber operations or agricultural production areas. A major conceptual objective of the rural community is to minimize

this potential for conflicts by providing opportunities for small lot rural residential development within a designated area, while allowing lower densities outside these areas where the potential for conflict between residential resource based land uses is greatest.

Residential development within Rural community centers is either conventional or manufactured single-family detached or semi-detached housing. As provided by the policies contained in the Development Patterns and Community Organization Element, lot sizes in rural community centers range from 2 - 10 acres. The lot sizes are a function of dependence on either on-site water supply, or on-site wastewater treatment or both and on the desire for generally lower population densities. In the community of Mineral, ~~existing~~ developed lots are much smaller than the 2 - 10 acre rural small-lot, but this community is served by a wastewater treatment facility. The concept of a rural community center recognizes the existence of smaller developed lots, while also recognizing that future development will generally require lots within the 2 - 10 acre range in order to ensure safe domestic water quality standards and to meet the community lifestyle objectives.

Physical design standards are consistent with the dominance of the natural environment and are less demanding than those applicable to urban and town centers. However, these standards also respond to factors not present in urban and town centers, including dependence on on-site water supply and wastewater treatment, wildland fires, the close proximity of agricultural and timber resources, and other natural land constraints.

Rural Service Centers. As their name indicates, rural service centers provide a small number of select or convenience type services and products to residents who live within these centers and on agricultural lands surrounding the centers. Tehama contains numerous rural service centers located in the I-5 Corridor Planning Area and in the Western Planning Area: Dairyville in the North I-5, Gerber and Proberta in the Central I-5 area, Richfield and Vina in the South I-5 area, and Paskenta and Flournoy in the Western Planning Area.

Public services provided in rural service centers are limited to schools, sheriff and combination of local volunteer fire protection during the winter and the California Department of Forestry fire protection during the summer. Residents must travel to urban or town centers to meet their primary retail commercial and service needs.

The influence of the surrounding environment limits opportunities for boundary expansion due to the predominantly high agricultural resource values of adjacent lands. Available residential living opportunities vary widely among rural service centers. Paskenta and Flournoy will accommodate limited growth on rural small lots of from 2 to 10 acres. This reflects the isolated location, sparse settlement pattern and limited basic services afforded the Western Planning Area.

Proberta and Gerber provide smaller lot sizes and compact centers to reduce conflicts between residential land uses and surrounding agricultural operations.

To promote the compactness of these centers, the land use plan provides for local convenience commercial centers. In Gerber, this area encompasses those blocks facing San Benito Avenue between Washington Avenue and Ramsey Avenue. This pattern is intended to provide a focus of commercial activity oriented to San Benito

Avenue, thereby retaining the quiet character of the residential area immediately to the east. In Proberta, a commercial area in the general vicinity of Highway 99W between First Avenue and Third Street would be accommodated. For both communities, larger agricultural support commercial should be located away from more sensitive residential areas.

In the South I-5 Planning Area, Richfield, Vina and the Squaw Hill area would provide an array of small scale convenience centers and agricultural support activity services. In Richfield, the plan establishes agricultural support commercial on the west side of Highway 99W from Richfield in the south to Sutter Road to the north. This includes opportunity for a local convenience center. For Vina, agricultural support commercial would be provided for in the vicinity of the intersection of Highway 99E and Vina Road. Additional commercial use on the east side of Rowles Road between Fifth and Sixth Streets in Vina would complement the similar commercial activities now found in this area. The Squaw Hill area directly west of Vina is provided with a local convenience center around the intersection of Squaw Hill Road and South Avenue in order to meet the needs generated by tourist and recreation use associated with Woodson Bridge State Park and Tehama County Park.

The rural service centers of Flournoy and Paskenta, located along Paskenta Road in the southern portion of the Western Planning Area, will continue to provide limited basic convenience type service to the sparsely developed surrounding lands. In Flournoy, the common location for this activity would be very close to the existing Flournoy Store and Post Office, market demand permitting. In Paskenta, this activity would be provided near the Paskenta store or, for agricultural support commercial, near the existing wood processing facilities.

OBJECTIVES

CO-1

Plan development within the County in a manner which will provide opportunities for current and future residents to enjoy small-scale, community oriented living environments that are similar to those currently found in the County. Encourage higher densities, where appropriate, to reduce agricultural land conversion demands.

CO-2

Protect private property rights and insure that an individual(s) actions(s) do not adversely impact the health, safety, and welfare fo the County's citizens.

CO-3

Promote a development pattern which, whenever possible, maximizes the use of existing public roads prior to constructing new roads.

CO-4

Encourage compact development and discourage linear development patterns.

CO-5

Develop a land use pattern which, to the maximum extent feasible, minimizes the

expenditure of public funds for road construction and maintenance.

CO-6

Promote a development pattern which will accommodate growth, consistent with other stated Objectives, the growth projected for the County during the planning period (1983-2000).

CO-7

Govern new development with subdivision, zoning, and other regulations that explicitly define government and private sector responsibilities and expectations with regard to an acceptable balance between public facility and service costs and public revenues derived from new growth.

CO-8

Accommodate growth in a manner that preserves the predominate rural lifestyle and unique qualities that make the County an attractive place to live and that recognizes that a rural lifestyle does not always necessitate the provision of the full complement of services normally found in urban communities.

CO-9

Broaden the employment opportunities for County residents by encouraging new industries which are appropriately scaled and located.

CO-10

Provision of a land use pattern which relates jobs to housing and vice-versa.

CO-11

Designate lands for industrial development which are appropriate for this purpose.

CO-12

Accommodate urban growth and other non-agricultural development by utilizing, whenever possible, lands which do not have agricultural viability.

CO-13

For those lands deemed appropriate for commercial and industrial uses, improve access to road, rail and air transportation in a cost-effective manner to facilitate their economic development.

CO-14

Allow opportunities for small scale businesses and industrial firms.

CO-15

Encourage development to locate adjacent to areas where fire protection services exist or can be efficiently provided.

COUNTYWIDE POLICIES

CO-a

The County shall, in coordination with the Cities of Red Bluff, Corning, and Tehama, ensure the availability of an inventory of developable lands sufficient to accommodate growth projected for the planning period (1983-2000).

CO-b

The County shall monitor, on a yearly basis; the rate at which the developable land inventory is being consumed, the population and employment growth of the County, and other pertinent indicators to gauge the County's growth.

CO-c

In 1985 and thereafter every five years, the County shall examine the results of the monitoring process for the previous period and via the amendment process, make appropriate adjustments in the inventory of developable land to accommodate the growth projected for the subsequent 20 year period. The intent of this policy is that the developable land inventory shall never have less than a 15 year supply. Five year adjustments in the developable land inventory may include either additions or reductions in this inventory, but the latter will occur only when new information indicates that this land is not suited for development and it is replaced in the inventory by other lands.

CO-d

The procedure for adding lands not now in the inventory of developable land shall be by the amendment process which can occur three times per year and can be initiated by either the County or property owner.

CO-e

The General Plan shall provide for four general types of communities and shall distribute the developable land inventory amongst them so that future residents have available the full range of lifestyle opportunities. These community environments are described in policy form in Table CO-7. Table CO-8 provides policies relating these communities to General Plan land use designations.

CO-f

The General Plan shall contain Residential, Commercial, and Industrial land use categories for development purposes, each of which is described in Tables CO-9 through CO-11.

CO-g

The lot size limitations described in Table CO-9 for Rural Residential Small and Large Lot categories do not apply to pre-existing legal lots. Such lots will be permitted to develop at a density of at least one dwelling unit per lot, provided all Zoning and Land Division Standards are met.

PLANNING AREA POLICIES

NORTH I-5 PLANNING AREA

CO (NI-5)-a

The development pattern shall recognize this planning area's major role in accommodating growth experienced by the County.

CO (NI-5)-b

The development pattern, to the extent feasible, shall provide for growth accommodation primarily within and adjacent to the City of Red Bluff, within Lake California, and on lands designated Rural Residential Small-Lot in the Bowman area.

CO (NI-5)-c

The development pattern north and west of Red Bluff shall recognize and to the extent feasible, utilize the existing road access provided by Walnut Street, Reeds Creek Road, Wilder Road, Live Oak Road, Red Bank Road and Monroe Avenue.

CO (NI-5)-d

The development pattern shall accommodate growth within the rural community of Bend and the rural service center of Dairyville in a manner which preserves the agricultural values of lands surrounding these communities.

CO (NI-5)-e

The development pattern shall recognize areas which have already experienced some development such as the Antelope Valley area, Wilson Road, and Surrey Village and provide levels of service appropriate for their density and intensity.

CO (NI-5)-f

The development pattern shall, to the extent feasible, relate new development to a level of services, including the timing of their provision, appropriate for the density/intensity of land use planned for its location.

CO (NI-5)-g

Grazing and Cropland use designations shall be recognized and future development shall, to the extent feasible, be accommodated initially within the residential land use categories designated on the land use map.

CO (NI-5)-h

In conjunction with the City of Red Bluff, the County shall recommend that the Local Agency Formation Commission (LAFCO) review the Development pattern shown on the General Plan's Land Use map and that LAFCO make a determination of a Sphere of Influence consistent with the General Plan's development pattern adjacent to the City of Red Bluff.

CENTRAL I-5 PLANNING AREA

CO (CI-5)-a

The development pattern shall recognize the predominantly agricultural land use of the planning area.

CO (CI-5)-b

Population growth shall be accommodated primarily in the Los Molinos area by a development pattern establishing a residential density gradient north and south along Highway 99E.

CO (CI-5)-c

The rural service centers of Proberta and Gerber shall accommodate growth consistent with their agricultural support function and in a manner which preserves the agricultural value of lands surrounding these communities.

CO (CI-5)-d

The County recognizes the potential need for a Community Service District in the Los Molinos area.

CO (CI-5)-e

The development pattern shall recognize the existing rural residential small-lot development in the vicinity of Byrne Avenue, Clement Avenue, and the Sacramento River.

SOUTH I-5 PLANNING AREA

CO (SI-5)-a

The development pattern shall recognize growth accommodation primarily within and adjacent to the City of Corning.

CO (SI-5)-b

As development demand based on population growth necessitates, land adjacent to the City of Corning shall be used to accommodate future population in the planning area.

CO (SI-5)-c

The rural service centers of Vina and Richfield shall accommodate growth consistent with their agricultural support function and in a manner which preserves the agricultural resource value of lands surrounding these communities.

CO (SI-5)-d

In conjunction with the City of Corning, the County shall recommend that the Local Agency Formation Commission (LAFCO) review the development pattern shown on the

General Plan's Land Use Map and that LAFCO make a determination of a Sphere of Influence consistent with the General Plan's development pattern adjacent to the City of Corning.

CO (SI-5)-e

The development pattern shall recognize the existing suburban residential development in the area bounded by Squaw Hill Road on the west, Gardner Ferry Road on the northwest, and Illinois Avenue on the east.

EASTERN PLANNING AREA

CO (E)-a

The development pattern shall accommodate growth primarily within the rural community centers of Manton and Mineral and within and/or adjacent to the subdivisions of Ponderosa Sky Ranch and the Paynes Creek areas along Highway 36E and shall recognize the limitations on the use of on-site wastewater treatment systems and available potable water supply.

CO (E)-b

The development pattern shall recognize ranching and related agricultural operations, as well as the timber, habitat, and scenic values this planning area affords.

CO (E)-c

The development pattern shall recognize the Tehama State Game Area, California State Game Refuge, the Lassen National Forest and the Lassen National Volcanic Park.

WESTERN PLANNING AREA

CO (W)-a

The development pattern shall accommodate growth primarily within and around the rural service centers of Flournoy and Paskenta located along Paskenta Road and on existing legal lots within the Pancho Tehama Subdivision along Boggs-Champlin Road.

CO (W)-b

The development pattern shall recognize ranching operations and the predominate grazing land use activity of this planning area.

CO (W)-c

Development accommodated in the planning area shall recognize the questionable availability of potable water supplies and the limited level of basic services provided by the County.

CO (W)-d

The development pattern shall recognize the timber resources of this planning area

and shall recognize the proximate boundaries of the Yolla Bolly-Middle Eel Wilderness area and the Shasta-Trinity and Mendocino National Forests.

CO (W)-e

The development pattern shall recognize the existing improvements made at the Wildhorse Mesa development.

IMPLEMENTATION. The land use designations shown on the General Plan land use maps and the land use categories and community type policies listed in Tables C0-7, 8, 9, 10, and 11 have been translated into zoning districts which are described in detail within the Tehama County Zoning Ordinance. To complete the implementation of the Plan, the County must revise existing zoning ordinance maps to reflect the General Plan land use map and the written policies that are included within the text of the Plan. The revision of the zoning maps must be completed in order to identify where changes have been made for different land uses and/or greater or lesser densities.

After this initial step has been completed, an advanced planning program will need to be established to implement the plan policies over time. The critical function of this program will be to monitor the growth of Tehama County as it relates to the consumption of the land supply inventory. A full description of the data requirements and a suggested methodology for accomplishing this task has been outlined in the General Plan PREFACE.

ENVIRONMENTAL IMPACTS. This section will consider the environmental effects of the Development Pattern/Community Organization element of the Community Development Group.

Earth. The General Plan will not result in significant impacts to man-made structures as the result of unstable earth conditions or in changes in geologic substructures. The land suitability analysis undertaken as part of the Plan Revision Program identified lands suitable for accommodating future residential, commercial, and industrial growth away from slope instability areas and known fault areas that were identified in the existing Seismic Safety Element.

The General Plan would produce significant impacts due to potential disruptions, displacements, compaction and overcovering of soils. The development pattern will consume land to accommodate future population growth. Site analysis and land division standards will minimize soil and slope displacement. Performance zoning standards will be utilized to reduce impacts of disruptions and overcovering of soils.

The Plan would produce significant impacts due to water and soil erosion resulting from the greater incidence of paved surfaces. Provisions for clustered development and maintenance of open space and required setbacks from creek sides would reduce impacts.

The Plan would not expose people or property to geologic hazards such as earthquakes, landslides, mudslides, or ground failure. The land suitability analysis (Technical Report #3 of the Plan Appendix) locates development away from known geologic hazards as identified in the existing Seismic Safety Element.

The Plan will create significant impacts in terms of changes to the topography and to ground surface relief features. Accommodation of development will call for additional roads, building pads and foundations, and easements. The development pattern attempts to minimize these impacts by allowing compact growth patterns and utilizing existing roads and easements where possible.

Land Use. The Plan will result in substantial alteration of present land use in Tehama County. Impacts to the environment will be significant, as development on lands previously used for agricultural production will preempt their continued agricultural use. Additional residential, commercial and industrial land use will produce greater demands for public services and utilities including roads, schools, water, and wastewater treatment. These demands have direct implication for local finances. To minimize these land use impacts, the development pattern utilizes a compact growth pattern adjacent to existing incorporated cities that can extend services in a cost-effective manner.

Population. The Plan will have a significant impact on the location, distribution and density of the human population in the County. The Plan designates land uses and appropriate densities to accommodate the County's future population and employment growth. The unavoidable effects include the use of an additional 10,169 acres of land for residential development and 527 acres of land for commercial and industrial development. Population centers such as Red Bluff and Corning will be reinforced, and the Bowman Area, Los Molinos and Lake California will experience significant new growth. Conversion of agricultural lands to accommodate population growth will be limited and is based upon a land suitability analysis which identified lands having highest agricultural resource value. Mitigation measures include the use of buffers and density gradients to minimize impacts upon adjacent land uses.

Air Resources. See the Air Quality Element of the Plan.

Plant Life. See the Wildlife Resources Element of the Plan.

Animal Life. See the Wildlife Resources Element of the Plan.

Public Services and Utilities. See the Public Facilities Element of the Plan.

Recreation. See the Public Facilities Element of the Plan.

Cultural Resources. See the Historic / Archaeologic Element of the Plan.

Circulation. See the Circulation Element of the Plan.

WATER SUPPLY, WASTEWATER TREATMENT, AND SOLID WASTE DISPOSAL

INTRODUCTION. The authority to prepare this element is provided by Section 65302 (d) of the Government Code which requires the preparation of an element for the conservation, development, and utilization of natural resources including water. This element must be developed in coordination with all district and city agencies which have developed, served, controlled, or conserved water

city agencies which have developed, served, controlled, or conserved water for any purpose. Under authority of Section 65303(e), a local government may prepare an element showing a general plan for sewerage disposal. Finally, Section 65302(a) requires the designation of lands used for solid waste disposal facilities.

The subject areas covered in this part of the Public Facilities Element are grouped together because they comprise the immediate day-to-day service needs required by all types and densities of development. It is important also to recognize the relationship of these topics to the other plan elements, particularly the Water and Water Quality Elements of the Resources Group.

FINDINGS. Provision of clean water and removal of both waterborne and solid wastes has been a responsibility of governments since at least the Roman times. Within the United States today, water supply systems are planned to supply every citizen with roughly 100 gallons of water per day, sewerage systems are planned to be capable of removing that 100 gallons from the household as wastewater, and solid waste disposal systems are planned to remove and dispose of roughly five and one-half pounds of solid waste generated per capita per day in an environmentally acceptable manner.

In Tehama County, the balance sought between the removal and use of potable water from the environment for domestic and agricultural needs and its treatment and return must be realized in order to accommodate future population growth and to protect the public health.

Water Supply. Tehama County's water supply for domestic and agricultural use is available primarily from the Sacramento River Groundwater Basin which underlies most of Tehama County's Valley Area and, to a lesser extent, surface water flows. Surface flow is supplied by the Sacramento River and its tributaries and is usually obtained through the exercise of either riparian or appropriative rights.

The location and availability of water resources has important implications to the County's development pattern and intensity/density of various land uses. By way of example, the Sacramento Groundwater Basin provides high well yields of excellent quality water and should support both agricultural and domestic growth projected to occur during the 20-year planning period.¹ However, moving east and west away from the valley floor the availability of groundwater becomes questionable. The boundaries of the water basin are not sharp, well defined edges, and the ability to supply water to development in these transition areas is also questionable. Once outside the groundwater basin water availability is severely limited. Finding groundwater in these hard rock formation areas is a "hit or miss" proposition. Even if groundwater is found, the reservoirs are generally small and may dry up during periods of drought. Small amounts of water could be obtained in these areas from surface flows using riparian or appropriative rights, but most of the streams in the foothill and mountainous areas of Tehama County are intermittent. Streams which

¹Phil Lorens, California Department of Water Resources, personal communication, June 4, 1981.

do flow year round usually feed the Sacramento River or have been totally appropriated by the Central Valley Project system during the summer months when their supply is in greatest demand.

The unavailability of water for domestic and agricultural use significantly limits opportunities for the intensive development or cultivation of lands outside the Sacramento River Groundwater Basin.

Domestic Water Distribution System. Once an accessible supply of potable water is located, a system of distribution is required. Tehama County residents are served by 66 separate water systems ranging in size from just 12 service connections to larger systems having thousands of service connections. In addition to these water distribution systems, there occur hundreds of smaller shared water systems and thousands of single family homes on individual wells. The discussion which follows provides an overview of existing conditions and examines the implications of the General Plan development pattern to major water distribution systems in the County. Also, the rationale used to relate future population growth and development densities to water distribution systems is presented.

- Red Bluff Municipal Water System. The Red Bluff system is comprised of 9 wells having a total capacity of 11 MGD (Million Gallons per Day) serving roughly 9,300 persons with over 3,100 service connections. The 1978 Master Water Plan for the City of Red Bluff identifies a 1988 service population of 15,200 persons based upon a design growth rate of 5% per year. The projected population does not account for annexation of large or substantially populated areas, either of which would tend to increase the actual growth rate.¹ The General Plan development pattern can be served in part by the Red Bluff water service area. However, extending water service west of Wilder Road would require additional wells and pressure zones for development along Live Oak and Reeds Creek Roads.²
- Corning Municipal Water System. The Corning water distribution system is comprised of 5 wells (a sixth is currently planned) providing over 54,000 gallons per hour to a population of 4,600.³ The Corning water service area includes the city limits; however, a few portions of Corning remain on individual water wells. With over 1,500 service connections there appears to be substantial available water supply for expansion. The limitation on Corning's existing water system is fiscal in nature, as groundwater is readily available from the Upper Sacramento Groundwater Basin.⁴

¹ Pace Engineering, City of Red Bluff Master Water Plan, 1978, page 31.

² Supra, page 29.

³ Tehama County LACCO, EIR for the Spheres of Influence for the City of Corning, 1980, page 24-25.

⁴ Phil Lorens, Supervising Engineering Geologist, Department of Water Resources, Red Bluff, California, personal communication, June 3, 1981.

The growth projected by the General Plan would be accommodated east of Corning, with extension of water services dependent upon the structure of an appropriate fee schedule to pay for new development hook-ups and additional water wells installed as necessary in future growth areas.¹

Countywide Water Provision. The Rio Alto Water District provides a water distribution system to Lake California. Adequate supply and distribution facilities are available to accommodate the growth projected to occur within this area. The remaining portions of Tehama County utilize either individual wells serving single family homes or small shared well systems serving groups of homes.

These individual systems are generally wells with no treatment facilities. The depth of draw and the hardness of the water are a function of the ground-water condition and the material through which the water flows to the well itself. These methods of supply are adequate to all individual needs to the point at which the density of habitation increases to cause actual or potential interference between on-site water supply systems and on-site disposal systems. The General Plan's development pattern recognizes this and distributes future growth at densities which respect the availability and type of water distribution systems in Tehama County.

Wastewater Treatment. The treatment of wastewater in Tehama County occurs primarily one of two ways: community collection and treatment with discharge to the Sacramento River or individual treatment at the site with return to the ground.

Centralized wastewater treatment systems are made up of three components: collection system, a treatment facility, and a disposal system. There are four community collection and treatment systems in Tehama County: the City of Red Bluff Wastewater Treatment System, the City of Corning Wastewater Treatment System, the Rio Alto Water District which has a wastewater treatment system serving the lower Lake California area, and the Tehama County Sanitation District No. 1 which serves the immediate Mineral area.

Outside of these community collection/treatment systems all wastewater in the County is treated within individual systems using either septic/leachfield systems or seepage pits.

The discussion which follows provides an overview of existing conditions and examines the implications of the General Plan development pattern to wastewater treatment facilities and available technologies in Tehama County.

Community Wastewater Collection Systems. There are four community wastewater treatment systems in Tehama County.

- Red Bluff Wastewater Treatment System. The Red Bluff Wastewater System provides tertiary treatment for an average daily flow of roughly 1.1 million gallons for the City of Red Bluff. The treatment facility is designed

¹Terry Snow, Director of Public Works, City of Corning, personal communication, June 4, 1981.

to handle a 2.3 million gallon average daily flow which provides capacity to accommodate an additional 8,000 to 9,000 population.¹

Recent annexations of land to the north of Red Bluff will consume a portion of the available capacity identified above. Additional capacity may be utilized to accommodate in-fills within Red Bluff or to service previous commitments to the Antelope area. In Antelope's case, wastewater is now pumped to the treatment plant via a force main that crosses the Sacramento River on the freeway bridge. It has been reported that the system serving Antelope can take some additional load by installing more interceptor mains. However, if this occurs, the force main across the river would have to be enlarged or paralleled if service were expanded to the entire Antelope area.²

Remaining capacity may be utilized to serve future population growth north and west of Red Bluff as identified by the General Plan's development pattern.

Over the course of the planning period, the growth projected to occur adjacent to Red Bluff would require wastewater treatment services beyond today's available capacity. Additional collection lines, pumping facilities, and treatment capacity to serve future population represent significant financial commitments. However, the location and density established in the Plan's development pattern provides potential offsetting economies of scale in service provision and, in conjunction with pumping stations, a west-east gravity flow to treatment facilities along the Sacramento River.

- Corning Community wastewater Collection System. The City of Corning is currently upgrading its wastewater treatment system. The new system, expected to be completed by late 1983, would provide additional collection line capacity and a new domestic and industrial tertiary treatment facility. With a design capacity of .27 million gallons per day (MGD) for industrial wastewater and .62 MGD for domestic dry weather wastewater treatment, the new system capacity will accommodate, at a minimum, a population increase of 700 persons.³ The General Plan for the City of Corning indicates that the new capacity would accommodate a population of approximately 6,500 persons, which would provide available capacity through the year 1990. The future wastewater collection service area is not expected to extend outside current service boundaries which are the City limits.

The County General Plan development pattern accommodates a significant amount of growth directly east of Corning, a pattern which generally complements the west-east directional siting of the new wastewater collection lines, as well as the directional gravity flow toward the Sacramento River where treatment and subsequent disposal will occur.

The future urban/suburban residential development pattern east of Corning will have significant public facilities implications with respect to waste-

¹E.E. Ross, Assistant Civil Engineer, City of Red Bluff, personal communication, February 19, 1982.

²Pacific Gas & Electric, Red Bluff Growth and Development Study, March 1979, page 10.

³Terry Snow, Director of Public Works, City of Corning, personal communication, December 3, 1981.

⁴City of Corning General Plan, 1982, page 12.

water treatment. The access of future development to wastewater collection lines is dependent upon available financial resources to extend connections to major sewer trunk lines. All services, including wastewater treatment, will need to be provided at urban levels and can be best provided by a general purpose government agency -- namely a city. In order to eventually accommodate this growth, Corning's city boundary should eventually coincide with the growth pattern shown on the General Plan land use maps.

- Rio Alto Water District. The Rio Alto Water District provides community wastewater treatment for the lower portion of Lake California, providing about 94 connections with wastewater flows running between .006 and .008 MGD. The wastewater treatment plant was designed to provide tertiary treatment with a capacity of .64 MGD, thus having a large unused capacity. The General Plan development pattern designates growth at urban densities in the Lake California area. The wastewater services available should be adequate to meet the future needs of this development.
- Tehama County Sanitation District #1. This district serves the needs of the area immediately around the rural community of Mineral. The wastewater system serving Mineral has a design capacity of .16 MGD with current dry weather flows of .045 MGD. There is very limited available capacity, with potential for an additional 60 hookups. The General Plan acknowledges this limitation and provides for limited additional growth in Mineral.

Decentralized Wastewater Systems. Individual on-site sewerage disposal systems are generally only acceptable when the soil conditions within a given area are such that the effluent, the liquid from the system, can percolate into the soil without contamination of the groundwater and without surfacing to create areas of dense, green, damp lawn. The percolation test required for acceptability of soils and/or specific locations for lots for septic systems requires the absorption of percolation of a fixed quantity of water out of a hole of specified depth within a fixed period of time. Constraints upon the success of perk tests are brought about by rocky soil, by ledges which do not have sufficient soil covering, by high water tables such that the perk test hole "strikes water," and by extremely porous soil conditions which virtually guarantee that the wastewater will reach the groundwater table.

The Water Quality section of the General Plan presents a full discussion of the impacts resulting from inadequately sited individual septic systems. The intent here is to note that the development pattern and the associated land use requirements and conditions established in the General Plan are consistent with the suitability of Tehama County's soils to absorb and purify wastewater. Technical Report #3, Development Suitability, of the Plan's Technical Appendix, examined all County lands with respect to their soil-septic suitability, and the results of this analysis have already been incorporated into the development pattern expressed in the General Plan. The exception to this, however, is the Los Molinos area. The General Plan development pattern has established Los Molinos as a Town Center with densities that will require a transition, from current individual septic/leachfield systems to a community wastewater system at some point in time during the planning period. This transition is prerequisite for attaining the Plan's development pattern and its associated policies.

In the same way, it must be remembered that the availability of ground and surface water resources and associated delivery systems have major implications for the density/intensity of land use for development purposes. These implications are expressed in matrix form in Figure WS-1 which relates water supply to the land use categories described in the Community Development Element.

A commitment by Tehama County to establish the General Plan's development pattern also represents a commitment to provide adequate levels of water service and wastewater treatment to match associated development densities.

Solid Waste Disposal. The California legislature has delegated primary responsibility for solid waste management to counties. Under the requirements of the Solid Waste Management and Resource Recovery Act of 1972, each county must prepare and implement a solid waste management plan.

In December of 1975, the Board of Supervisors adopted the Tehama County Solid Waste Management Plan which addresses the collection of solid wastes, its subsequent disposal in sanitary landfills, and efforts to recycle portions of the generated solid waste. Now, more than seven years since the plan's adoption, Tehama County finds itself in a transition period with regard to County government's role in the provision of tax supported services. In particular, a means must be found to insure that Tehama County's solid waste disposal cost is equitably borne by all residents receiving collection and disposal services.

The General Plan cannot by itself solve the current financial problems experienced in the provision of solid waste disposal services. However, the Plan does function to guide future development of an area since it projects population growth and identifies land suitable for residential, commercial, and other public and private uses. The population projections of the General Plan can be used to estimate the amount of future solid waste and the life expectancy and available remaining capacity of existing solid waste sites. Importantly, the General Plan can be used to identify appropriate sites for waste disposal, transfer and processing stations and, if appropriate, resource recovery facilities.

Tehama County's existing solid waste disposal site is located two miles northwest of Red Bluff at the end of Plymire Road. The General Plan land use map designates lands surrounding the disposal site as grazing, which represents a compatible adjacent land use.

Solid waste disposal sites are classified according to the geologic and hydrologic features of the disposal area and the capability of protecting surface and groundwater quality. Class I sites must be designed to prevent the discharge of any wastes to usable waters. Class II sites, of which there are two categories, may be in proximity to or have hydraulic continuity with usable water. Class III sites include disposal areas which intercept groundwater or where wastes may be dumped into waters. All solid wastes generated in the County are dumped at the county-owned and privately operated Red Bluff

¹ Government Code, Sections 66700 et seq.

site, which has been designated a Class-2 site by the State Water Quality Control Board.¹

Using the General Plan's population projections together with the solid waste generation factors contained in the Solid Waste Management Plan, Table SLR-1 projects the tonnage of solid waste that will be generated by different sources during the planning period. On the basis of the disposal site's design capacity and using current disposal rates, it has been estimated that the existing site will be filled in the latter part of the 1980's. A recent report tends to confirm that the disposal site has a 9 year available capacity.² It is therefore important that the County begin to study possible future sites for waste disposal which are located in proximity to future population centers, yet which will not pose potential hazards to surrounding land uses. As an interim option to establishing a new waste disposal site, the County may wish to expand the existing facility in order to increase its life expectancy.

OBJECTIVES

WATER SUPPLY

WS-1

To the extent feasible, locate future development in areas where existing water districts have available resources to accommodate development, where existing districts may be expanded to serve new development in a cost-effective manner, where service districts providing new systems can be created on a cost-effective basis and in areas deemed suitable on the basis of appropriate field tests for on-site systems.

WASTEWATER TREATMENT

WT-1

Provide a level of wastewater treatment appropriately scaled to match a development's characteristics and site conditions.

WT-2

To the extend feasible, locate future development in areas where existing community wastewater treatment systems have unused capacity, where it is cost-effective to expand existing systems, where service districts providing new systems can be created on a cost-effective basis, and where on-site inspections and field tests have established the long-term, cost-effective feasibility of on-site systems.

SOLID WASTE DISPOSAL

SW-1

Develop a solid waste program that equitably relates revenues to operating expenses for all County residents.

¹Tehama County Solid Waste Management Plan, 1975, page 45.

²Oakridge Estates, Draft EIR, 1981, page 36.

POLICIES

WATER SUPPLY

WS-a

Future development should be located with respect to type and intensity/density of land use as provided in Figure WS-1 in order to ensure the long-term economically feasible and environmentally sound provision of water of adequate supply and quality to existing and future residents.

WS-b

The County shall encourage the use of water conservation techniques appropriate for existing and new development.

WASTEWATER TREATMENT

WT-a

Future development should be located with respect to type and intensity/density of land use as provided in Figure WS-1 in order to ensure that the long-term, economically feasible and environmentally sound provision of adequate wastewater treatment facilities to existing and future residents.

WT-b

The County shall investigate and permit limited experimentation with alternative wastewater systems for individual and community systems.

SOLID WASTE DISPOSAL

SW-a

The County shall study the feasibility and availability fo future sites for solid waste disposal consistent with the development patterns with an emphasis on centralization.

SW-b

The County shall provide for solid waste collection and disposal services in a cost-efficient manner.

IMPLEMENTATION. Policies WS-a and WT-a will be implemented through the General Plan land use maps and the zoning ordinance.

Policy WS-b requires the preparation of water conservation guidelines, with subsequent inclusion in the Tehama County Building Codes and enforcement via regular site inspections during the construction phase of projects.

Policy WT-b is self-explanatory.

Policy SW-a will be implemented by the County Road Department in conjunction with the County Planning Department. To implement Policy SW-b, the Board of Supervisors should implement the recommendations of the Solid Waste Committee as outlined in the Memorandum to the Board of Supervisors dated February 8, 1982.

ENVIRONMENTAL IMPACTS. This section will consider the environmental effects of the Water Supply, Wastewater Treatment, and Solid Waste Disposal provisions of the Public Facilities Element.

Increased development of the residential, commercial, and industrial sectors in Tehama County will cause an increased demand for water services, wastewater services and solid waste services. (Note: See the Energy Element for a full discussion of impacts to energy resources during the planning period). The ability to meet these demands in a timely fashion may constrain development in certain areas of the County. In particular, the Corning area currently has a moratorium on the issuance of building permits until the Corning Wastewater System is upgraded.

During the planning period, it may be expected that both the Red Bluff and Corning wastewater treatment plants and their associated infrastructure will require expansion as their capacities are reached. Also, the growth projected to occur in the Los Molinos area will, at some point during the planning period, require the construction of a community collection and wastewater treatment system.

To minimize impacts to public facilities in the County, the Plan's development pattern recognizes the availability of domestic water supply and the suitability of soils to accommodate individual septic systems and locates rural-small lot residential growth in areas suited for this specified density. In this way, a portion of future growth is accommodated independently of major infrastructure requirements.

The existing Red Bluff sanitary landfill will exhaust its available capacity by 1990. It has been indicated that the site may be expanded to accommodate additional fill.

SCHOOLS, LIBRARIES, AND RECREATION FACILITIES

INTRODUCTION. This element includes a discussion of the General Plan's development pattern and its relation to Tehama County schools, libraries and recreation facilities. Schools are defined to include public elementary and high schools. Libraries include those facilities and services provided by the Tehama County Library system. Recreation includes both active and passive activities within unincorporated portions of the County and within growth accommodation areas as detailed in the General Plan's development pattern. The authority to address these public facilities is provided by Government Code Sections 65303(a) and 65303(k).

FINDINGS, Schools. The General Plan's development pattern will result in an increase in public schools population. The primary concern of the County's school districts is the need for future expansion and improvements

to accommodate the projected increase in student population. Tehama County is divided into 18 school districts. The schools serving Tehama County, their current enrollments and capacities are listed on Table SLR-2. Presently, several school districts have surpassed or are nearing their capacities. Mobile or temporary classrooms usually serve as short term solutions to classroom overcrowding. Construction of additional new classrooms is dependent upon state financing through the LeRoy Green Act which, if discontinued, would necessitate the use of ~~temporary mobile classrooms and/or double school sessions.~~

The General Plan cannot solve the ~~overcrowding~~ problems currently experienced in Tehama County; however, the Plan's development pattern has been formulated to help school districts cope with problems relating to the provision of educational resources in a rural county. In particular, the development pattern designates higher residential densities closer to existing school facilities. At a minimum, the development pattern attempts to reduce transportation costs for school buses and associated operational expenses. Similarly, the development pattern attempts to reduce future problems associated with bus load limits on County bridges, road maintenance problems, and the safety factor of school bus stops on County roads.

In evaluating the impacts of County growth on school districts, it is possible to convert the Plan's population projections into estimates of student population using pupil generation factors. These factors assume that, on the average, each dwelling unit will contain a certain number of persons of school age. Usually these factors divide school age persons into elementary and secondary schools and frequently distinguish between different housing types. Pupil generation factors for Tehama County School Districts were selected on the basis of similar rural counties in California and include the factors of .43 (grades K-8) and .27 (grades 9-12). Tehama County has been divided into five planning areas and County population growth projections among them. In only a few instances do these planning area boundaries correspond with school district boundaries. Table SLR-3 shows the relationship between planning areas and school districts. School districts are not shown as being within a planning area when only a small, sparsely inhabited portion of the district falls within the planning area. Within each planning area, this table estimates the distribution of 1982-1987 student population growth among the school districts. Based upon the availability of school facility capacity information presented on Table SLR-2, the following discussion identifies possible deficiencies in Tehama County public school facilities.

Red Bluff High School District will experience an estimated growth of 614 high school students, with Red Bluff Elementary School picking up an additional 471 students. Presently Red Bluff High has an available capacity of 252, and Red Bluff Elementary has an available student capacity of 120. Evergreen Elementary School will experience an estimated 254 increase in elementary school students during the next 5 years. Evergreen currently has an available capacity for 100 students. Corning Elementary School is

¹ Bill Davis, Administrative Assistant, Tehama County Department of Education, letter to George Robson, Tehama County Planning Director, May 20, 1981.

currently at 102 percent of capacity, with 1987 student population projected to increase by 172 students. The above analysis represents an initial attempt at what should become an on-going planning relationship between the County's school districts, the Tehama County Department of Education, and the County Planning Department. On a regular basis, the Planning Department should assume responsibility for collecting basic census and building permit data in order to provide an early warning planning system for Tehama County's school districts. Cooperative planning should be undertaken in developing school enrollment projections, such as shown in Table SLR-3, identifying facility needs and deficiencies, analyzing the school-related impacts of new development proposals, and selecting potential school sites.

Libraries. Tehama County Library furnishes basic public library services in 11 locations to all Tehama County residents. The County Library is a member of the 20 member North State Cooperative Library System which provides interlending and reference services for residents of 13 counties. Reference services and library materials are also available from four other large cooperative systems through Tehama County Library.¹

Tehama County libraries provide a range of service from a County-owned building staffed with full-time librarians to library shelves located in a rural general store/post office supervised by proprietor or within local public schools. As shown in Table SLR-4, demand for library service remains strong and has increased steadily over the past five years. This growth is reflected by the number of registered borrowers in Tehama County, as shown in Table SLR-5, which comprises roughly one-third of the County's 1981 population.

Demand for library services and associated space requirements is projected to grow, with the County's population. Information supplied by the Tehama County Library, shown in Table SLR-6, indicates the space requirements associated with the General Plan's projected year 2000 population. |

The General Plan's development pattern will require larger centralized library facilities within the Cities of Red Bluff and Corning, while populations outside the I-5 Corridor might best be served by a library-mail system.²

Recreation Facilities. The recreation needs of Tehama County residents and the role of recreation activities varies widely throughout the County depending upon place of residence and type of activity sought. Needs within unincorporated urban and suburban areas adjacent to Red Bluff vary from the needs of people living in rural service centers and isolated rural communities. Needs in the urban areas, where most lands are developed and population densities are high relative to surrounding rural lands, include needs for parklands, either developed simply as turfed playfields or equipped with facilities such as ball fields, tennis courts, basketball courts, etc. These types of needs can be met, to an extent, through the ability of school districts to function as recreation providers. However, the ability of schools to assume both financial and direct responsibility for the provision of recreation opportunities is not an acceptable solution to meet recreation needs.

Within Tehama's rural communities the demands for recreation opportunities are no less than those of persons living in close proximity to urban areas, but they are of a different nature. In rural communities, recreation oppor-

¹ Jill Rockwell, Director, Tehama County Library, personal communication, Jan. 6, 1982

² Jill Rockwell, op. cit. III-100

tunities relate more to the surrounding character of the land, with residents participating in unstructured forms of recreation. In these areas, schools and service organizations often provide rural community residents with the formal types of recreation facilities normally found in more developed urban areas. The existing Tehama County Comprehensive Parks and Recreation Plan recognizes the different needs described above, and provides appropriate adaptive recreation standards for different types of communities found within the County.¹

The Recreation Plan should effectively serve the recreation needs generated by the General Plan's development pattern. However, the Revised General Plan also recognizes that the location of future projected growth requires that options be maintained within growth areas to provide future sites for park and recreation facilities. As Tehama County grows, opportunities now available to meet these needs will be foreclosed or available only at substantially higher cost. The discussion which follows provides a strategy to preserve future recreation opportunities.

An important tool available to County government in meeting community recreation needs is provided by Section 66477 of the Subdivision Map Act. This section authorizes counties and cities to require the dedication of land, the payment of in lieu fees, or a combination of both for park or recreation purposes as a condition of the approval of a final or parcel map. Only fees may be required in subdivisions containing 50 parcels or less and there are time limitations on their use. Dedicated parklands and parklands purchased with in lieu fees must be available for the use of residents of the subject subdivision, but these lands need not be located within the subdivision. There is also no requirement that these parklands be reserved for the exclusive use of the residents of the subdivision. If a particular subdivision is located adjacent to parklands, the in lieu fee may be used to purchase parklands in other areas of the community in order to maintain the proper balance between the number of community residents and the amount of available parklands. Although a city or county may require the dedication of parkland or fees under Section 66477, they must be conveyed or paid directly to the local public agency which provides park and recreation services to the community within which the proposed subdivision will be located, if said agency elects to accept the land or fees. A local public agency includes special districts and school districts. If, for example, a special district elects to accept dedicated parklands, the district, not the city or county imposing the dedication requirement, assumes responsibility for its maintenance.

Section 66477 of the Subdivision Map Act requires that it be implemented by local ordinance establishing definite standards for the determination of the size of the dedicated park area and the amount of the in lieu fee. The Cities of Red Bluff and Corning have adopted residential construction taxes shown in Table SLR-7. Currently, Tehama County has neither a construction tax nor park dedication fees-area requirements.

In order to adequately provide for the existing and future recreation needs of residents living adjacent to incorporated urban areas in a manner consistent

¹Tehama County Comprehensive Parks and Recreation Plan, 1977.

with their needs and the fiscal capabilities of County government, Tehama County should take the following action. Parklands dedications or in lieu fees should be required as a condition of approval of all final or parcel maps for land divisions occurring in areas designated by the Community Development Element as urban or suburban residential development. Parklands dedication and fee payment will be required only if a local public agency recreation provider or special district agrees to accept and maintain them.

It is anticipated that initially dedicated parklands will be developed as grassy or turfed playfields without lights, fences, or recreational equipment of any sort. This type of facility preserves the option for future, more intensive recreation development as the area grows and recreation demand intensifies. At some future point in time, there may be sufficient support for an assessment district, annexation, or some other mechanism for financing recreation facility improvements, but these opportunities will be limited if parkland is unavailable or available only at a high price reflecting the development of the surrounding community. Requiring parkland and fee dedications now will provide valuable, maintainable recreation facilities for the present while reserving the opportunities for more intensive development in the future.

OBJECTIVES

SLR-1

Development of a land use pattern which can be adequately served in a cost-effective manner with schools, libraries, and recreation facilities.

POLICIES

SLR-a

The County shall enter into cooperative planning arrangements with school district officials for the exchange of data, the preparation of student enrollment projections, and the development of facility plans responsive to growth funding permitting.

SLR-b

The County should investigate the establishment of a subdivision review procedure to obtain written verification from potentially affected shcool district(s)

that adequate school capacity will be available or is planned to be available for students generated by a proposed development. Public hearings shall be held prior to any final determinations by the County.

SLR-c

The County should monitor the need for additional library services at existing branches and seek to establish new branch facilities in response to growth.

SLR-d

The County may require an offer of dedication of parklands or the payment of in lieu fees in areas of the County designated for urban and suburban development as per ordinance requirements.

SLR-e

The locations of existing and proposed large-scale community recreation facilities shall be designated on the General Plan Land Use maps as Natural Resource Conservation (Park) - (letter designator NP).

SLR-f

In determining appropriate levels of recreation services to meet the various needs of residents. The County shall consult the standards contained in the existing Comprehensive Parks and Recreation Plans.

SLR-g

If conditions of overcrowding and financial hardship are evidence by the various school districts, the County may establish an ordinance requesting the dedication of land, payment of fees in lieu thereof, or a combination of both, for classrooms and related facilities for elementary or high schools as a condition to the approval of a residential development as per ordinance requirements. Public hearings shall be held prior to any determinations by the County. This Policy shall be enacted only after all other available measures to reduce the impacts have been exhausted.

IMPLEMENTATION. Policy SLR-a will be implemented through the County Planning Department and school districts. Policy SLR-b will be implemented by requiring school district(s) verification of available student capacity as a condition of approval for a final tract map. Policy SLR-c implementation will be the responsibility of the Tehama County Library Director and will require a commitment of County funding. Policy SLR-d will be implemented by revision of the land division standards. Policies SLR-e and SLR-f are self-explanatory. SLR-g shall be implemented through the adoption of an Ordinance.

ENVIRONMENTAL IMPACTS. This section will consider the environmental effects of Schools, Libraries, and Recreation provisions of the Public Facilities Element. Effects will be classified as either significant or not significant. The discussion of significant effects will indicate any unavoidable effects and mitigation measures proposed to minimize significant effects, or reference will be made concerning where in the Plan this

significant effect is discussed. This discussion will also note objectives, policies and implementation programs which are designed to mitigate the significant effects on other elements. Effects found not to be significant will be briefly discussed to indicate the basis of this termination.

Several County school districts are currently operating at or close to capacity levels and will require expansion of facilities and new facilities to accommodate future student population. Mitigation measures available to school districts include the Emergency Classroom Law of 1979, developer school impact fee, and State School Facilities Fund (LeRoy Greene Act).

The County library system will have to be expanded to meet the needs of the community. In order to maintain its current level of 2.2 books per capita, the library system would require 167,102 books in circulation by year 2000. As the County grows and urban and suburban areas adjacent to Red Bluff and Corning develop, there will be a demand for local neighborhood parks close to future residential areas. Also, as the county's population ages, the need will occur for senior recreation facilities. Policy SLR-f in conjunction with the Quimby Act provisions may be used to provide future recreation opportunities within Tehama County.

Implementation Program

INTRODUCTION

This part of the Plan presents a tabular summary for the implementation measures necessary to carry out the policies outlined in Part Three of the Plan. The table has been keyed to each policy, and includes a brief description of the implementing action, time frame for implementation, responsible agency, and the nature of fiscal implications associated with the policy's implementation.

As a prelude to the implementation summary table, a series of objectives relating to the operation of the planning process is presented.

OBJECTIVES. The following objectives should be considered as guidelines for use in implementing the General Plan.

- GPI-1 Develop a General Plan internally consistent with all other plan elements and which provides the policy basis for its implementation system.
- GPI-2 Insure that the General Plan will be applied consistently and equitably to all development proposals.
- PGI-3 Establish a planning process which can respond to changing conditions or community values, yet one which will not yield to short-term pressures exerted by narrow interest groups.
- GPI-4 Establish a planning process which has the personnel and data resources to competently and objectively assess the singular and cumulative impacts of both day-to-day and long-range planning matters.

GPI-5 Ensure a planning process accessible to all citizens of Tehama County and one which recognizes the continuing need for citizen review of the goals, objectives, policies and standards contained in the General Plan.

GPI-6 As part of the ongoing planning process, formulation and operation of an institutional framework which recognizes and complements current planning policies and management practices conducted by the Cities of Red Bluff, Corning and Tehama; special districts within the County; Federal (National Forest, National Park, Bureau of Land Management) and State agencies, and adjacent counties.

TABLE AG-I: IMPORTANT FARMLAND MAP LEGEND FOR
TEHAMA COUNTY

P = All lands with Prime Farmland soil mapping units which are irrigated.

S = All lands with State Important soil mapping units which are irrigated.

U = All lands which support the listed crops with soil mapping units other than Prime Farmland and State Important soil mapping units.

L = All lands which are not included in the P, S, or U category and are cropped continuously or on a cyclic basis. (Irrigation not a factor.)

LP = All lands included in the L category which have soil mapping units listed for Prime Farmlands or State Important Farmland. (Irrigation or cropping history is not a factor.)

Source: Corning Office, U.S. Soil Conservation Service.

TABLE AG-2: TEN YEAR SUMMARY - VALUE OF AGRICULTURAL PRODUCTS

	<u>1971</u>	<u>1972</u>	<u>1973</u>	<u>1974</u>	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>
Fruit & Nut Crops	\$ 7,742,200	\$ 9,781,500	\$17,930,900	\$14,627,160	\$15,229,000	\$19,616,000	\$24,180,000	\$31,811,000	\$33,864,000	\$33,134,000
Livestock & Poultry	9,800,800	12,828,100	17,541,300	12,450,500	11,661,500	11,724,400	11,720,000	16,811,000	20,165,000	22,518,000
Field Crops	2,917,000	3,111,400	4,521,700	6,881,900	6,905,600	6,721,000	7,065,000	7,555,000	9,786,000	12,798,000
Misculture & Range	2,898,800	3,145,600	4,524,400	5,810,000	6,611,300	6,947,000	8,953,000	9,032,000	11,168,000	11,139,000
Livestock & Ptry Products	2,112,300	2,283,800	3,030,200	3,254,000	3,227,700	3,164,500	2,514,500	2,964,000	4,177,800	5,037,000
Seed Crops	511,800	584,300	662,500	1,629,000	2,617,400	1,830,700	1,761,600	1,444,100	2,304,000	2,446,000
Nursery Products	960,000	876,00	1,332,00	1,625,00	1,390,000	1,471,000	1,357,000	1,020,000	1,004,000	1,227,000
Apiary Products	72,400	107,400	155,700	344,300	353,300	384,090	363,840	404,500	400,950	557,000
Vegetable Crops	103,000	134,000	111,000	40,000	147,000	111,000	260,000	255,000	440,000	513,700
	\$27,227,300	\$32,852,100	\$49,809,700	\$46,666,860	\$48,143,400	\$52,028,690	\$58,174,940	\$71,296,600	\$83,909,750	\$89,369,700

Source: Agricultural Commissioner, Tehama County Annual Crop Reports.

TABLE AG-3: F FARMS BY SIZE

<u>Farms by Size</u>	1978 Number/%		1974 Number/%	
Less than 10 acres	185	14	156	13
10 to 49 acres	544	42	460	40
50 to 179 acres	246	19	252	22
180 to 499 acres	135	11	118	10
500 to 999 acres	63	5	64	5
1,000 to 1,999 acres	37	3	31	3
2,000 acres or more	72	6	79	7
Total	1282	100	1160	100

Source: 1978 Census of Agriculture, Preliminary Report, Tehama County,
page 1.

TABLE AG-4: TEHAMA COUNTY FARMS BY VALUE OF SALES

	1978 Number/%		1974 Number/%	
Sales of \$20,000 or more	375	29	268	23
\$100,000 or more	122	9	74	6
\$40,000 to \$99,999	126	10	94	8
\$20,000 TO \$39,999	127	10	100	9
Sales of less than \$20,000	907	71	892	77
\$10,000 to \$19,999	164	13	144	12
\$5,000 to \$9,999	164	12	202	18
\$2,500 to \$4,999	207	16	185	16
Less than \$2,500	372	29	361	31

Source: 1978 Census of Agriculture, Preliminary Report, Tehama County,
page 2.

TABLE AG-5: AVERAGE VALUE OF LAND PER ACRE (DOLLARS)

	Sacramento Valley ¹		
	1970	1980	1981
Irrigated:			
Truck & Vegetables	1,075	2,820	3,384
Intensive Field Crops	945	2,540	2,900
Extensive Field Crops	770	2,220	2,570
Pasture	575	1,595	1,980
Nonirrigated:			
Cropland	425	1,140	1,320
Pasture	320	810	1,050
Rangeland	210	460	500

¹ Includes Shasta, Tehama, Glenn, Butte, Colusa, Sutter, Yuba, Placer, Yolo, and Sacramento Counties.

Source: Security Pacific Bank, California Agriculture, 1981, page 33.

TABLE AG-6: COMPARISON OF PARCEL SIZE MINIMUMS BETWEEN
1974 GENERAL PLAN AGRICULTURAL LAND USE
DESIGNATIONS AND IMPLEMENTING ZONING
DISTRICTS

1974 General Plan Land Use Designation	Zoning Districts	
	U-A	A-2
A-I	20 AC/1 AC	20 AC/2 AC
A-G	40 AC/1 AC	40 AC/2 AC

Source: Sedway/Cooke.

TABLE AG-7: MINIMUM PARCEL SIZE REQUIREMENTS FOR AGRICULTURAL LANDS

<u>Agricultural Classification</u>	<u>Minimum Parcel Size Ranges</u>
C, Cropland	10 acres to 40 acres
G, Grazing	40 acres to 160 acres
CC, Composite Cropland	5 acres to 40 acres (El Camino Irrigation District ONLY)

TABLE T-1: COMMERCIAL FOREST LAND OWNERSHIP

	<u>Acres</u>	<u>% of Total</u>
PUBLIC:		
National Forest ¹	215,000	46.7
Other Public ²	4,000	0.9
TOTAL PUBLIC	219,000	47.6
PRIVATE:		
Forest Industry ³	213,000	46.3
Farmer-owned ⁴	10,000	2.2
Misc. Private-corporate ⁵	14,000	3.0
Misc. Private-noncorporate ⁶	4,000	0.9
TOTAL PRIVATE	241,000	52.4
TOTAL ALL OWNERSHIP	460,000	100.0
Total Land Area Tehama County	1,909,000	
Percent of Total Land in Commercial Forest		24.1

¹National forest lands are federal lands which have been designated by Executive Order or statute as national forests or purchase units and other lands under the administration of the Forest Service, including experimental areas and Bankhead-Jones Title III lands.

²Other public lands are federal land other than national forests, including lands administered by the Bureau of Land Management, Bureau of Indian Affairs, and miscellaneous federal agencies, and lands owned by states, counties, and local public agencies, or lands leased by these governmental units for more than 50 years.

³Forest industry lands are owned by companies or individuals operating wood-using plants.

⁴Farmer-owned lands are lands owned by operators of farms.

⁵Miscellaneous private-corporate lands are owned by companies or corporations which do not operate wood-using plants. Included are corporate farms, some railroad lands, oil company lands, real estate and landholding company lands, and lands held by banks, other financial institutions, and various other companies and corporations.

⁶Miscellaneous private-noncorporate lands are privately owned lands other than forest industry, farmer-owned, or corporate lands.

Sources: Thomas F. Robson, Area Forest Specialist, Cooperative Extension, University of California, Extension Forestry, and John Ohman, Appraiser, Tehama County Assessor's Office, Red Bluff, California.

TABLE T-2: CALIFORNIA TIMBER HARVEST

County Ranking By Volume	1979 Ranking By Volume	Volume Board Feet ¹	% Change From 1979 Volume	% of State Total	Dollar Value ²	% Change From 1979 \$ Value	% of State Total	Ranking By Value
Siskiyou	1	470,021	-7.87	15.2	\$ 75,497	-0.01	13.3	2
Humboldt	2	419,913	-9.36	13.5	111,066	-14.0	19.6	1
Mendocino	3	343,489	+0.04	11.1	73,585	-12.0	13.0	3
Del Norte	4	210,743	-28.5	6.8	69,811	-28.1	12.3	4
Plumas	5	180,107	-35.7	5.8	24,100	-47.6	4.2	8
Trinity	7	174,730	-27.4	5.6	34,235	-21.3	6.0	5
Shasta	6	167,810	-32.4	5.4	29,239	-32.1	5.2	6
El Dorado	8	150,676	00.0	4.9	17,033	00.0	3.0	9
Tehama	9	147,208	+0.06	4.8	24,374	-0.06	4.3	7
Tuolumne	10	116,056	-14.9	3.7	15,731	-0.07	2.8	10
Sierra	11	86,050	-36.3	2.8	9,850	-55.6	1.7	14
Lassen	15	85,057	-14.5	2.8	11,736	-20.4	2.1	11
Placer	12	81,871	-39.2	2.6	11,424	-48.4	2.0	13
Modoc	14	74,145	-26.8	2.4	11,531	-36.1	2.0	12
Fresno	13	55,351	-47.5	1.8	4,700	-63.7	0.8	17
Tulare	18	53,641	-26.9	1.7	4,846	-36.3	0.8	16
Butte	16	42,650	-50.4	1.4	5,313	-58.4	0.9	15
				92.3			94.0	

Timber Cut From:

Private Land	1,863,004	-17.7	60.3	\$379,287	-22.0	67.0
Public Land	1,227,952	-25.5	39.7	\$186,469	-27.2	33.0
TOTAL	3,090,956	-21.0	100.0	\$565,756	-23.8	100.0

¹Board feet is the quantity cut and scaled - thousands of board feet.

²Value of timber immediately before cutting - thousands of dollars.

TABLE WR-I: SIGNIFICANT NATURAL AREAS OF TEHAMA COUNTY

<u>North I-5 Planning Area</u>	<u>Description</u>
Blackberry Island (private ownership)	Large dense stand of riparian vegetation typical of Sacramento Valley. Some of island is cultivated. 62 acres.
Pine Creek Oak Woodland (BLM)	Oak woodland plant community representative of vegetation once abundant in the region. Some grazing. 80 acres.
Table Mountain (private ownership)	Vernal pool atop volcanic plateau. Diverse native plant community. 1,200 acres.
<u>Central I-5 Planning Area</u>	
Mooney Island (private holdings)	Valley riparian community. Diverse wildlife population. 300 acres. Some agricultural activity.
Todd Island (BLM)	Valley riparian community. Variety of wildlife. 100 acres.
<u>South I-5 Planning Area</u>	
Vina Plains Vernal Pools (private ownership)	Vernal (spring fed) pools in association with diverse native plant community. 120 acres.
Woodson Bridge State Recreation Area (California Department of Parks and Recreation)	Typical valley riparian community in Natural Preserve area. Abundant plants and animals. 300 acres.
Foster Island (BLM)	Valley riparian community variety of wildlife.
Merrill's Landing Wildlife Area (WCB)	Valley riparian community variety of wildlife

TABLE WR-I (CONT.)

Eastern Planning Area

Battle Creek Area (BLM; City of Red Bluff; some private holdings)	Ponderosa pine forest and riparian community. Varied animal life. 3,200 acres.
Butt Mountain (U.S. Forest Service)	Conifer forest and chaparral community. Visible glacial features.
Cuh Creek Basin (Lassen National Forest)	Mixed conifer forest and foothill flora. 1,200 acres.
Inskip Hill (private ownerships)	Hill is of volcanic origin. Cypress stand in association with pine and chaparral communities. 1,000 acres.
Pine Creek (private ownerships)	Foothill woodland, riparian, and chaparral communities. Diverse wildlife. 900 acres.
Tuscan Buttes (private ownerships)	Volcanic formations, springs, foothill woodland plant community. 2,000 acres.

Western Planning Area

Anthony Peak (Mendocino National Forest)	Redfir forest and chaparral community. Access road and picnic area. 640 acres.
Raglin Ridge Cypress Stand (BLM)	Cypress forest, Knobcone pine forest and chaparral community. 640 acres.
Tedoc Mountain (Shasta-Trinity National Forest; BLM)	Jeffrey pine and ponderosa pine forests.
Tehama Sundshore Dikes (private ownerships)	Geological formation. Oak woodland community. 1,000 acres.
Tehama Wildlife Area (Lassen National Forest; California Department of Fish and Game)	Deer winter range, woodland, riparian, and chaparral plant communities. 43,605 acres.

Source: California Natural Areas Coordinating Council, Inventory of California Natural Areas, 1977.

TABLE WR-2: SIGNIFICANT WILDLIFE HABITATS IN TEHAMA COUNTY

<u>Group Species Habitats</u>	<u>Planning Area(s)</u>
Deer Fawning Areas	Western, Eastern
Deer Winter Ranges:	
Lake Hollow	Western
Tomhead	Western
Beegum	Western
Eastern Tehama	Eastern; Central & North I-5
Deer Summer Range	Western
Fall/Spring Deer Holding Areas	Eastern
Critical Deer Migration Corridors	Western, Eastern
Black Butte Nodding Needle Grass Areas	Western
Vernal Pools	South I-5
Valley Oak Forests	North & South I-5
Sacramento River Riparian Habitat	North, Central & South I-5
Other riparian associations	Eastern
<u>Individual Species Habitats</u>	
Spotted Owl Nesting Territories	Western, Eastern
American Peregrine Falcon Nesting Sites*	(locations withheld for species protection)
Wild Turkey Ranges	Western, North I-5
Vina Plains Waterfowl Wintering Areas	South I-5
Yellow-Billed Cuckoo Nesting Territories**	(locations withheld for species protection)
Swan Wintering Areas	Eastern
Bald Eagle Nesting Areas*	(location withheld for species protection)
Sandhill Crane Wintering Areas	North I-5
Great Blue Heron Rookery	North, Central & South I-5
Prairie Falcon Nesting Area	Eastern
Golden Eagle Nesting Area	Eastern
Red Tail Hawk Nesting Area	Eastern
<u>Fish Habitats</u>	
Warmwater Fish Areas	Western, North, Central, South I-5
Anadromous Fish Areas	All
Resident Trout Areas	All

* State and Federal listed endangered species.

** State listed rare species.

Source: Tom Stone, California Department of Fish and Game.

TABLE WR-3: RARE AND ENDANGERED PLANTS OF TEHAMA COUNTY

Name	Planning Area(s)	Status
<i>Astragalus pauperculus</i> (depauperate milk-vetch)	North I-5 Eastern	CNPS Candidate
<i>Antirrhinum subcordatum</i> (dimorphic snapdragon)	Western	CNPS Candidate
<i>Cryptantha crinita</i> (silky cryptantha)	North I-5 Western	CNPS Candidate
<i>Euphorbia hooveri</i> (Hoover's spurge)	South I-5	CNPS Candidate
<i>Fritillaria pluriflora</i> (adobe-lily)	North and South I-5	CNPS Candidate
<i>Madia stebbinsii</i> (Stebbin's madia)	Western	CNPS Candidate
<i>Orcuttia greenei</i>	South I-5	CR
<i>Orcuttia pliosa</i> (hairy orcuttia)	South I-5	CE
<i>Orcuttia tenuis</i> (slender orcuttia)	Eastern	CE
<i>Polygonum bidwelliae</i> (Bidwell's Knotweed)	Eastern	CNPS Candidate
<i>Stipa lemmontii</i> (hairy Lemmon's needlegrass)	Western	CR

CE - California Department of Fish and Game Endangered

CR - California Department of Fish and Game Rare

CNPS - Candidate - Unofficial candidate species by California Native Plant Society

TABLE WR-4: RIPARIAN VEGETATION CLASSES

<u>Climax</u>	Comprised mainly of black walnut, cottonwood, sycamore, oaks and alders with an undergrowth of box elder, grape, blackberry, poison oak and some perennial grasses. *Acres of climax vegetation along Sacramento River, Tehama County reach (1978) = 2,889 acres.
<u>Subclimax</u>	Similar to climax, but less dense and lower tree heights. Mix of trees is predominantly alders, cottonwoods and willows. *Acres of subclimax vegetation along Sacramento River, Tehama County reach (1978) = 1,177 acres.
<u>Young Trees</u>	Similar to subclimax but vegetation is less mature, less dense, and tree heights are lower. *Acres of young trees along Sacramento River, Tehama County reach (1978) = 482 acres.
<u>Grasses and Forbs</u>	This classification is comprised mainly of forbs (low growing herbaceous plants), grasses, and low growing willows and alders. Note: When agricultural land is left idle, native plant succession begins, sometimes within a few years. As nature reclaims the land, the signs of cultivation gradually disappear, and it is then often difficult to distinguish dormant agricultural land from lands in this category. The distinction is useful, however, as native plants have a greater ability to support wildlife populations. *Acres of grasses and forbs along Sacramento River, Tehama County reach (1978) = 2,911 acres.

A second factor used to describe riparian communities relates to the vegetation's susceptibility to inundation. Each of the vegetation classes above may further be referred to as either "High" or "Low" terrace lands, described below.

High Terrace: Generally free from inundation except during exceptionally high river flows.

Low Terrace: Generally inundated at only moderately high river flows.

Source: Sacramento River Environmental Atlas, 1978.

TABLE WR-5: SACRAMENTO RIVER ACCESS POINTS IN TEHAMA COUNTY

<u>River Mile</u>	<u>Name (Owner)</u>	<u>Facilities</u>
218	Tehama Co. River Park (County)	picnicking, boat ramp, cafe, bait/tackle
219	Woodson Bridge Rec. Area (State)	camping
218	Riverside Sportsman's Resort (private)	camping, picnicking, boat dock, rentals, cafe, bait/tackle, gas
230	Hinden Harbor Mobile Home Park (private)	camping, boat ramp, dock and rentals, bait/tackle, gas
230	Mouth of Mud Creek Fish Access (County)	picnicking, boat ramp and hoist
230	River Inn Mobile Home Park (private)	camping, boat dock, ramp & rentals
230	Driftwood Fishing Resort (private)	camping, boat dock, boat rentals, bait/ tackle and gas
230	Pelhams Bay Resort (private)	camping, boat dock, ramp, rentals, cafe, bait/tackle, gas
Antelope Creek	Antelope Creek Trailer Park (private)	camping, boat ramp, boat dock
243	Red Bluff Diversion Dam (USBR)	camping, picnicking, boat ramp
245	Red Bluff River Park Fish Access (City of Red Bluff)	boat ramp
245	Red Bluff Marina and River Park (City of Red Bluff)	bait/tackle, cafe, gas, boat rental, boat dock/slip, picnicking

TABLE WR-5 (CONT.)

<u>River Mile</u>	<u>Name (Owner)</u>	<u>Facilities</u>
245	Red Bluff Trailer Park (private)	Camping, boat dock/slip
246	Samuel Ayer Park (City)	
246	Dog Island Park & Fishing Access (USBR)	
247	Ide Adobe State Park (State)	picnicking, historic site
257	Bend Mobile Home Park (private)	camping, boat dock/slip
257	Bend Bridge Fishing Access	picnicking & boat ramp/hoist
259-261	Sacramento River - Paynes Creek Recreation Area (BLM)	camping, picnicking
267	Jelly's Ferry Fish Access (BLM)	picnicking
Mouth of Battle Creek	(State)	fishing access

Source: Sacramento River Environmental Atlas, 1978.

TABLE WR-6: NATURAL RESOURCE CONSERVATION LAND USE CLASSIFICATIONS*

<u>Subcategory</u>	<u>Purpose and Use</u>	<u>Criteria</u>	<u>Planning Conditions</u>
Significant River or Creekside Corridor	To identify and afford protection to riparian habitats.	Identified riparian habitat, significant river/creekside natural area. (CDFG, CNDBD) ¹	<ul style="list-style-type: none"> ● Regulation of land use, ● regulation of vegetation removal, and ● use of setbacks or natural buffers.
Habitat Resource	To protect and maintain documented, significant wildlife habitats for their aesthetic and ecological values. These areas are defined as supporting habitat for sensitive animal and plant species. These lands should remain in their natural states, yet may allow wilderness study, grazing, and passive recreational activities (hiking, nature study) if these activities do not threaten the integrity of the habitat.	<ul style="list-style-type: none"> ● Identified as a significant natural area by CNACC, CNDBD, CNPS, and/or CDFG.¹ ● Located in a critical deer fawning area, migration corridor or winter range. ● Identified riparian habitat (CDFG and CNDBD).¹ ● Rare/endangered plant/animal habitat (CDFG). 	<ul style="list-style-type: none"> ● Regulation of land use, ● regulation of vegetation removal, and ● regulation of siting structures.

I. CNACC - California Natural Areas Coordinating Council
 CNDBD - California Natural Diversity Data Base
 CNPS - California Nature Plant Society
 CDFG - California Department of Fish and Game

*Partial listing of subcategories only.
 See also Open Space and Recreation Element.

Source: Sedway/Cooke.

TABLE M-1: MINERAL RESOURCE AND SCIENTIFIC ZONES

MRZ-1: Areas where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence.

MRZ-2: Areas where adequate information indicates that significant mineral deposits are present or where it is judged that a high likelihood for their presence exists.

MRZ-3: Areas containing mineral deposits the significance of which cannot be evaluated from available data.

MRZ-4: Areas where available information is inadequate for assignment to any other MRZ zone.

SZ: Areas containing unique or rare occurrences of rocks, minerals, or fossils that are of outstanding scientific significance shall be classified in this zone.

Source: Guidelines, Title 14, California Administrative Code, Chapter 8, Subchapter 1, Article II, Section 1(2).

TABLE NR-1: TEHAMA COUNTY OPEN SPACE INVENTORY

<u>Natural Resource Preservation</u>	<u>Public Land - State and Federal</u>
Anadromous fish spawning waters	Black Butte Reservoir
Rare/endangered animal habitats and plant communities	Dutch Gulch Reservoir, Tehama Lake
Riparian corridors	Ide Adobe State Park
Sacramento River, its tributaries and their banks	Jelly's Ferry Fishing Access
<u>Resource Production Management</u>	
Timber Preserve Zones	Lassen National Forest
Grazing lands	Lassen National Park
Croplands	Mendocino National Forest
Gravel extraction operations	Red Bluff Diversion Dam
Groundwater recharge areas	Sacramento River: Paynes Creek Recreation Area
Commercial fishing waters	State Game Refuge
<u>Outdoor Recreation</u>	<u>Tehama Wildlife Management Area</u>
Scenic highway corridors	Tehama River Parkway
Historic/cultural sites	Todd Island
River/stream/creek access points	Trinity National Forest
Hiking/bicycle/equestrian trails	Woodson Bridge State Recreation Area
Federal, state, county parks	Yolla Bolly Wilderness
Private recreation facilities	
<u>Public Safety</u>	<u>Public Land - County</u>
Earthquake fault zones	Bend Bridge Fishing Access
Unstable soil areas	Camp Tehama & Brokenshire Picnic Area
Flood plains (100 yr. flood)	Cone Grove Park
Watersheds	Gerber Park
High fire risk areas	Mill Creek Recreation Area
	Ridgeway Park
	Simpson Finnell Park
	Tehama County River Park
	Antelope Park
	Noland Park
	Red Bluff River Park
	Samuel Ayer Park
	Dog Island Park

Source: Sedway/Cooke, 1982.

TABLE NR-2: NATURAL RESOURCE CONSERVATION LAND USE CLASSIFICATIONS

Subcategory	Purpose & Use	Criteria	Planning Considerations
Natural Resource Land	To protect the natural resource base of Tehama County for its economic, aesthetic and ecological values. Land uses would be limited to very large lot rural residences subject to development siting regulations.	This subcategory would be applied to private lands with limited value as timberlands, grazing lands, croplands, but with value as open space resources. These lands are also characterized by limited road access and public facilities/services, and moderate to severe geographic hazards (slope, soil stability, etc.)	Residential development on Natural Resource lands shall be limited to single family detached residences. Minimum parcel sizes for division would be 40 acres.
Recreation Resource	To protect significant recreation opportunities for all County residents and visitors.	This classification would be applied to private land adjacent to major County, State, and Federal recreation facilities.	Uses within this classification would be subject to regulations mitigating their visual, noise, traffic, and other impacts on the adjacent recreation resource.
Park	To identify existing public parks and future sites suitable for public parks. Uses would include both active and passive forms of recreation activity.	Differing community and demographic factors will dictate park size, recreation facilities, and location.	Park scale and facilities should be compatible with the community type and surrounding land uses.

Source: Sedway/Cocke, 1982.

TABLE W-1: TEHAMA COUNTY IRRIGATION DISTRICTS

Water Source	District Name	Allocation (AF/yr)	1981 Use Rate (AF/yr)
Corning Canal	Rawson Water District	NA	250
	Proberta Water District	5,500	5,500
	Elder Creek Water District	4,600	8,000
	El Camino Irrigation District	N/A	500
	Thomes Creek Water District	8,400	8,400
	Corning Water District	25,300	25,300
Tehama-Colusa Canal	Richfield Water District	NA	500
	Tehama Water District	400	400
	Kirkwood Water District	2,100	500
Mill and Antelope Creeks (some ground-water)	Los Molinos Mutual Water Company	NA	NA Approx. 600 shareholders
Deer Creek	Deer Creek Irrigation District	NA	NA Approx. 21 shareholders
Deer Creek	Stanford/Vina Irrigation District	2/3 Deer Creek	*
Sacramento River	Anderson-Cottonwood Irrigation District	*	*

N/A - Do not receive allocation, therefore not applicable.

* - Data not available.

TABLE A-1: EMISSION INVENTORIES (TONS/DAY)

	POLLUTANT				
	Reactive Organic Gases	Oxides of Nitrogen	Sulphur Oxides	Total Suspended Particulates	Carbon Monoxide
1979 (ARB)	10.93	10.81	1.25	15.53	51.15
1982 (ARB)	10.3	10.84	1.33	16.24	49.20
1982 (Revised)*	11.17	11.28	1.36	16.37	53.05
1987 (ARB)	9.98	10.77	1.48	17.53	46.6
1987 (Revised)*	11.74	11.37	1.52	17.77	52.76

*Revised emission inventories are based on the General Plan's high population projection. The higher population projections affect the following categories only:

- Residential Fuel Combustion
- Incineration
- Dry Cleaning
- Architectural Coatings
- Asphalt Paving
- Domestic Solvents
- Petroleum Marketing
- Light Duty Autos
- Light and Medium Trucks
- Motorcycles

Source: Donald Ballanti, Certified Consulting Meteorologist, 1982.

TABLE HA-I: STATE AND FEDERALLY LISTED HISTORIC SITES IN TEHAMA COUNTY

California Registered Historic Landmarks

- No. 12 - Residence of General William B. Ide. (1.5 miles north of City of Red Bluff.)
- No. 117 - Home of Mrs. John Brown. (135 Main Street, Red Bluff.)
- No. 183 - First Tehama County Courthouse. (2nd and "D" Streets, City of Tehama.)
- No. 357 - Indian Military Post, Nomi Lakee Indian Reservation. (4 miles north of community of Flournoy.)

Federal Register of Historic Places

- Odd Fellows Building. (342 Oak Street, Red Bluff.)
- Park Headquarters - Lassen Volcanic National Park. (Mineral. Off Highway 36.)
- Cone and Kimball Building. (747 Main Street, Red Bluff.)
- Molino Lodge Building. (3rd and "C" Streets, Los Molinos.)
- Old Bank of America. (710 Main Street, Red Bluff.)
- Los Molinos Vicinity; Ishi Site. (East of Los Molinos in Deer Creek Canyon.)
- Sulphur Creek Archaeological District, Mill Creek Vicinity.

Source: Sedway/Cooke, 1982.

TABLE CO-I: EXISTING TEHAMA COUNTY LAND OWNERSHIP/LAND USE

<u>Ownership/Land Use</u>	<u>Acres</u>	<u>Percent of Total</u>
PUBLIC		
Federal	460,159	24.2
State	50,053	2.6
County	314	.02
Subtotal	510,516	26.82
PRIVATE		
Agriculture ¹	1,097,256	58.0
Timber ²	241,700	12.7
Developed ³	15,226	.8
Undeveloped ⁴	39,942	2.1
Subtotal	1,394,124	73.6
TOTAL	1,904,640	100*

*Figures do not total 100 due to rounding.

¹Tehama County Agricultural Commission, 1980 Crop Report.

²Lands Under Timber Preserve Zoning, 1980.

³Includes all lands within incorporated cities, plus developed residential, commercial, and industrial County lands.

⁴Remaining undeveloped County lands.

Source: Tehama County Assessor and Sedway/Cooke, 1982.

TABLE CO-2: ESTIMATED LAND USE REQUIREMENTS FOR
RESIDENTIAL AND EMPLOYMENT PURPOSES -
1981-2000¹

	Additional Acres Required				Cumulative Total
	1981-85	1986-90	1991-95	1995-2000	
Housing	2,430	2,847	2,482	2,410	10,169
Employment	126	148	128	125	527
Total	2,556	2,995	2,610	2,535	10,696

¹Factors used to convert population growth into acres of land are shown in the Plan Appendix, Report 2, Tables 9, 11, and 12.

Source: Sedway/Cooke, 1981.

FIGURE CO-1. COMPOSITE ANALYSIS MODEL

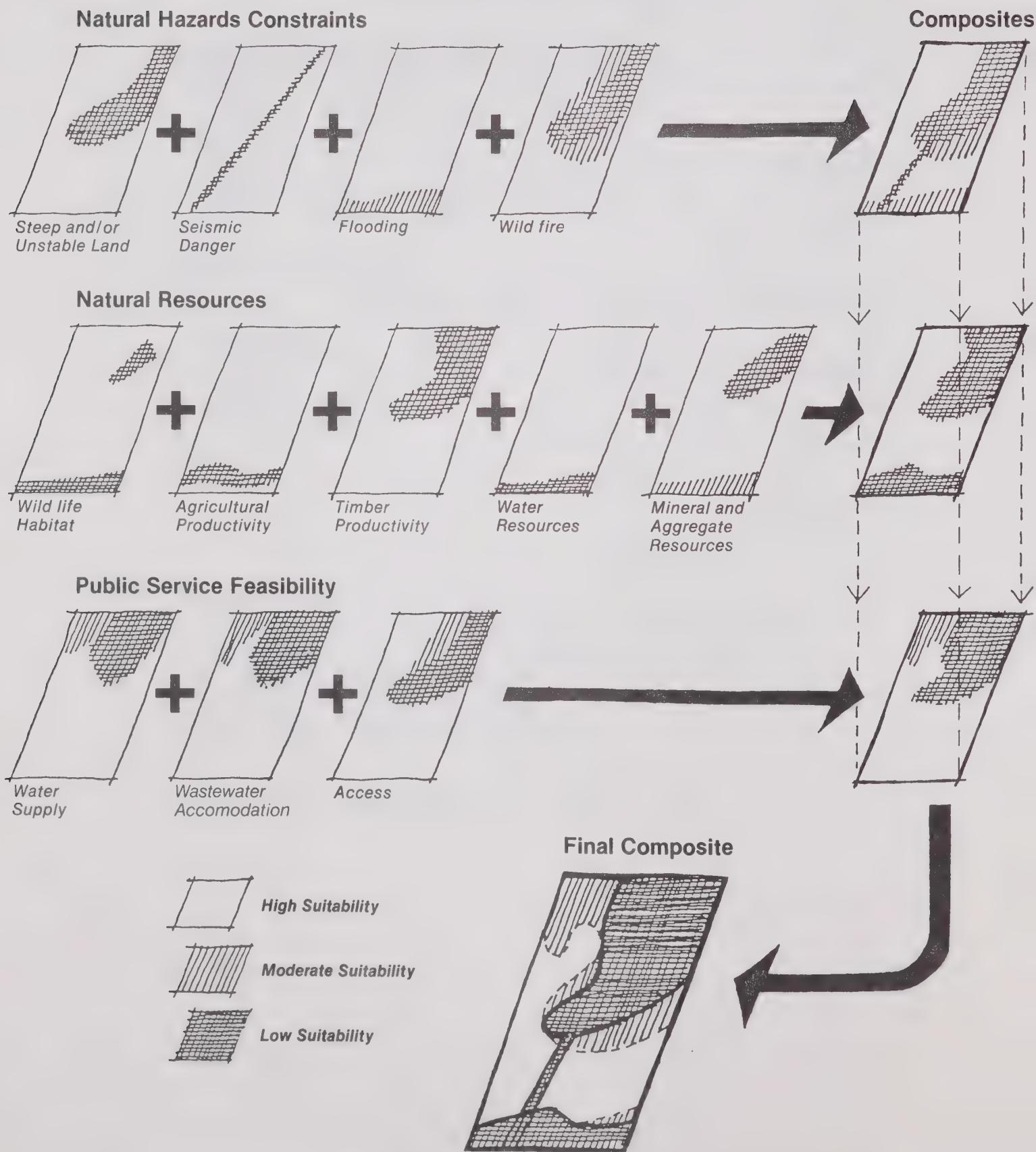


TABLE CO-3: DEVELOPABLE LAND SUPPLY BY PLANNING AREA

<u>Planning Area</u>	<u>Development Suitability of Land Supply (Acres)</u>	
	<u>High</u>	<u>Moderate</u>
North I-5	1,300	54,900
Central I-5	200	9,000
South I-5	400	17,300
Eastern	0	1,300
Western	0	<u>38,500</u>
TOTAL	1,900	121,000

Source: Sedway/Cooke, 1981.

TABLE CO-4: ACREAGE AVAILABLE FOR HOUSING AND EMPLOYMENT GROWTH IN UNINCORPORATED AREAS

Planning Area	Residential Land Use Designation				Employment Land Use Designations			Growth Reserve	Total Acres
	Urban Single-Family	Sub-Urban	Rural Small-Lot	Rural Large-Lot	Commercial	Industrial			
North I-5	320	4,517	3,337	12,152	107	81	2,826		23,340
Central I-5	73	262	409	0	46	103	0		893
South I-5	239	566	0	0	0	253	1,735		2,793
Eastern	0	395	712	0	*	*	0		1,107
Western	0	1,700	357	625	*	*	0		2,682
Total	635	7,440	4,815	12,777	153	437	4,561		30,815

*Acreage was not calculated for these categories due to the map scale of the Eastern and Western planning areas.

Source: Sedway/Cooke, 1982.

TABLE CO-5: POTENTIAL IN-FILL FOR INCORPORATED AREAS

<u>City</u>	<u>Building Type</u> ¹	<u>Average Density</u> ²	<u>Potential In-Fill</u> ³		<u>Population</u>
			<u>Acres</u>	<u>Units</u>	
Red Bluff	S/F	4.3 d.u.'s/ac	1,098	4,721	11,803
	M/F, 2-4	12	5	60	150
	M/F, 5+	16	<u>231</u>	<u>3,702</u>	<u>9,255</u>
		Total	711.7	5822	21,208
Tehama	S/F	4.4 d.u.'s/ac	14	62	155
Corning	S/F	2 d.u.'s/ac	215	430	1,075
	M/F, 2-4	5	100	500	1,250
	M/F, 5+	8	<u>175</u>	<u>1,400</u>	<u>3,500</u>
		Total	475	2,300	5,825
			=====	=====	=====
		GRAND TOTAL	1,200.7	8,184	27,188

¹ S/F = single family; M/F, 2-4 = 2-4 dwelling units per building; M/F, 5+ = 5 or more dwelling units per building.

² d.u./ac = dwelling units per acre.

³ As of March, 1982.

⁴ Assume 2.5 persons per dwelling unit.

Source: Draft Tri-County Housing Element, May 1981, and Sedway/Cooke, 1982.

TABLE CO-6: 1981 SCHOOL DISTRICT TRANSPORTATION COSTS AND STUDENT DENSITY

<u>School District*</u>	<u>Students/ Sq. Mi.¹</u>	<u>Per Capita Miles² Total Enrollment</u>	<u>Cost Per Capita³ Total Enrollment(\$)</u>
Antelope	9.2	62	113
Corning Union	6.6	73	98
Evergreen	1.8	133	201
Gerber Union	5.7	123	160
Lassen View Union	.7	91	168
Los Molinos Unified	1.7	124	211
Manton Joint Union	.9	362	221
Plum Valley	.3	492	366
Red Bluff Union	12.9	64	91
Reed Creek	.2	242	244
Richfield	3.8	169	125

High School Districts

Corning Union High	1.1	128	172
Red Bluff Union High	.9	66	114

*The school districts of Bend, Elkins, Flournoy, Kirkwood, and Mineral do not operate buses.

¹Density was calculated by dividing total miles within school district by total district enrollment.

²Total annual bus miles per district divided by total district enrollment.

³Total district transportation cost divided by total district enrollment.

Source: Tehama County Department of Education and Sedway/Cooke, 1982.

TABLE CO-7: COMMUNITY TYPES AND APPLICABLE POLICIES

Community Type	Applicable Communities	Incorporated Status	Services	Employment/Economic Function
Urban Center	Red Bluff Corning	Yes Yes	All urban services.	Major employment and retail trade center.
Town Center	Tehama Los Molinos Lake California	Yes No No	Most urban services.	Secondary employment and retail trade center.
Rural Community Center	Bowman Bend Manton Mineral Paynes Creek Ponderosa Sky Ranch	No No No No No No	On-site wastewater treatment (Mineral has limited community collection); on-site or shared water systems.	Minor employment with limited or no retail trade.
Rural Service Center	Dairyville Gerber Proberta Gerber Vina Richfield Flournoy Paskenta	No No No No No 	Limited or no urban services.	Minor employment, little or no retail trade, primarily agricultural support related.

Source: Sedway/Cooke, 1982.

TABLE CO-8: POLICIES GOVERNING RELATIONSHIP OF COMMUNITY TYPES TO LAND USE DESIGNATIONS

<u>Land Use Designation</u>	Community Type				<u>Service Center</u>
	<u>Urban Center</u>	<u>Town Center</u>	<u>Rural Community Center</u>		
RESIDENTIAL					
• Urban	X	X			
• Suburban	X	X			
• Rural Residential Small-lot ¹			X		X
• Rural Residential Large-lot ¹			X		X
COMMERCIAL					
• Commercial Recreation				X	X
• Local Convenience	X	X		X	X
• General Commercial	X	X			
INDUSTRIAL					
• General Industrial	X	X			
• Industrial Park	X	X			

Legend: X= land use designation within living environment.

¹The Rural Residential Large-Lot designation would apply to living environments characterized by one or more of the following conditions:

- Proximity to lands categorized as timber, grazing or croplands.
- Incertain long-term availability of water.
- Remoteness from rural service centers.
- Severe limitations on septic tank use.
- Inaccessibility via County-maintained roads.

TABLE CO-9: RESIDENTIAL AND GROWTH RESERVE LAND USE CATEGORIES, DENSITY AND HOUSING TYPE POLICIES

<u>Subcategory</u>	<u>Purpose</u>	<u>Gross Density Units/Acre</u>		<u>Single Family Lot Sizes</u>		Single Family Detached P	Single Family Semi-Detached P	Single Family Attached, 2 Units P	Multi-Family Attached, 3 to 8 Units P	Multi-Family Story P
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MIN</u>					
Urban Residential	To provide living environments with access to all urban services.	3.1	16	5,000 ¹ sq. ft.						
Suburban Residential	To provide living environments in close proximity to urban areas. These areas may provide many or all urban services.	.5	3	10,500 ¹ sq. ft.		P	P	D	D	X
Rural Residential, Small - Lot ³	To provide living environments receiving only limited or no urban services, usually within rural service centers or clearly defined rural residential communities.	.1	.5	2 AC		P	D	X	X	X

1. Assumes 28% of gross acreage is consumed by residential streets, small scale neighborhood recreation facilities, and site limitations.
 2. Assumes 9% of gross acreage is consumed by residential streets, small scale neighborhood recreation facilities and site limitations.
 3. The lot size limitations described in Table CO-7 for the Rural Residential Small and Large Lot categories would not apply to pre-existing legal lots. Such lots would be permitted to develop at a density of at least one dwelling unit per lot, provided the following conditions are satisfied:

- o Compliance with current septic tank standards.
- o Compliance with water supply standards designed to ensure an adequate long-term water supply, including provisions for well monitoring.
- o Compliance with access standards designed to provide adequate circulation for the lot(s) to be served; a circulation pattern which will not create future access problems and maintenance costs beyond those normally expected; sufficient emergency access for medical, police, and fire protection services; and adequate evacuation routes for residents.

TABLE C0-9 (CONT.)

<u>Subcategories</u>	<u>Purpose</u>	<u>Gross Density Units/Acre</u>		<u>Single Family Lot Sizes</u>		Single Family Detached P	Single Family Semi-Detached X	Single Family Attached, 2 Units X	Multi-Family Attached, 3 to 8 Units X	Multi-Family 2 to 3 Story X
		<u>MIN</u>	<u>MAX</u>	<u>MIN</u>	<u>MAX</u>					
Rural Residential - Large Lot ³	To provide living environments receiving no urban services and located in areas of the County characterized by one or more of the following conditions: <ul style="list-style-type: none"> - Proximity to lands categorized as timber, grazing, or croplands. - Uncertain long-term availability of water. - Remoteness from rural service centers, rural residential community centers. - Severe limitations on septic tank use. - Inaccessibility via County maintained roads. 	None	.1	10 AC	None	P	X	X	X	X

P = permitted by right.

D = permitted subject to discretionary review.

X = not permitted.

TABLE CO-10: COMMERCIAL LAND USE CATEGORIES AND POLICIES

<u>Subcategory</u>	<u>Purpose</u>	<u>Location Requirements</u>	<u>Size And Scale</u>
Local Convenience Center	To provide a limited selection of convenience goods within either walking distance or brief driving distance of residents. Primary tenant is usually a small grocery store which may be supplemented by a gas station. These commercial areas may also include small restaurants/bars.	Along arterial, major collector street or junction of arterial and collector. Located within rural service centers. Support market area population of 250 to 500 persons within two to three minutes driving time, and no other convenience center within the market area.	1,500 to 5,000 sq. ft. of retail space; 1/8 to 1/2 acre.
	To provide a selection of agricultural supplies and services necessary to support the needs of agricultural activity. Uses include the sale of agriculturally related construction materials and supplies, agricultural and farm equipment and supplies, feed and grain supply, and agriculture related service providers. These services would normally be found within rural service centers	As designated on Land Use maps, support market area varies according to the level of agricultural or forestry activity in area and proximity to urban areas.	

TABLE CO-10 (CONT.)

<u>Subcategory</u>	<u>Purpose</u>	<u>Location Requirements</u>	<u>Size And Scale</u>
General Commercial	<p>Provides for a wide range of goods and services needed by residents and business firms which are inappropriate in community or neighborhood centers due to size or operating characteristics or are not economically feasible in such centers. Uses include sale of construction and building materials, auto parts, construction equipment, autos and trucks. Other uses provide basic services such as vehicular repair, plumbing, electrical, and fabrication of wood or metal.</p>	<p>Along arterial streets or in conjunction with business parks.</p>	<p>Size and scale of General Commercial should relate to the market support area. The following range shall apply:</p> <p>From: 4,000-7,500 persons within five minutes driving time - 25,000 sq. ft. of retail space; up to 2-1/2 acres.</p> <p>To: 15,000-30,000 persons within 10 minutes driving time - up to 50,000 sq. ft. of retail space; up to 5 acres.</p>

TABLE CO-10 (CONT.)

<u>Subcategory</u>	<u>Purpose</u>	<u>Location Requirements</u>	<u>Size And Scale</u>
Commercial Recreation	To provide opportunities for the development of privately owned lands that have exceptional natural resources. The purpose of this land use would be to provide commercial recreation services to the public.	In close proximity to exceptional natural resources.	Depends upon both the size and type of resource in question.

Source: Sedway/Cooke, 1982.

TABLE CO-11: INDUSTRIAL LAND USE CATEGORIES AND POLICIES

<u>Subcategory</u>	<u>Purpose</u>	<u>Location Requirements</u>	<u>Site Planning Requirements</u>
General Industry	To provide opportunities for industrial land uses. This category provides for the inter-mixing of non-industrial firms providing materials and services related to industry. Other non-industrial uses may be permitted on an interim basis with conditions providing for reversion to industrial uses. Appropriate land uses include light and heavy manufacturing, support wholesale, and office uses.	Location in proximity to I-5 freeway access points to provide opportunities for highway-dependent industrial uses.	Any adjacent residential land use should be buffered from impacts associated with general industrial land uses.

TABLE CO-II: (CONT.)

<u>Subcategory</u>	<u>Purpose</u>	<u>Location Requirements</u>	<u>Site Planning Requirements</u>
Industrial Park	To provide opportunities for the planned and grouped concentration of industrial uses. These uses are characterized by their low or moderate impacts on surrounding land uses, varying scales of operation, and similar service requirements.	Located within urban areas in proximity to freeway, highway, or arterial.	<p>Site planning for identified industrial parks should:</p> <ul style="list-style-type: none"> a) provide closely related internal circulation system to external road network; b) use drought-tolerant landscaping to provide an attractive working environment; and c) provide opportunities for phased expansion of park boundaries.
Rail-Served Industry	This designation is intended to prevent the preemption of appropriate rail-served land by non-rail use activities. This category provides exclusively for industrial uses requiring rail access. The reservation of rail-served land will be an increasing concern as energy and transportation costs continue to increase.	Large blocks of land served by Southern Pacific rail service, with vehicular access to Interstate I-5 and state highways by arterial, collector or direct connections and free from potential land use conflicts with residential users.	Maximum opportunities for providing rail access must be ensured. Lands with access to rail service and having high or moderate suitability to accommodate rail-related industry would be most appropriate.

FIGURE WS-1: POLICY MATRIX FOR LOCATION OF LAND USES RELATIVE TO WATER SUPPLY AND WASTEWATER TREATMENT

WATER SUPPLY	WASTEWATER TREATMENT				
		Within an existing district with either unused capacity or the potential to add capacity.	Within the potential expansion area of an existing sewer district.	Areas located outside an existing sewer district but where there is either potential to develop a new facility using land application of wastewater, potential for discharge to water bodies) or where soils pose only limited constraints to septic tank use.	All other areas.
Within existing district with significant additional unused allocation. ¹	UR, SR C, I	UR, SR C, I	SR, RS	RL	
Expansion area of existing district with significant additional allocation or groundwater source to expand, as identified in California Department of Water Resources (DWR) Bulletin #118, September 1975.	UR, SR C, I	UR, SR C, I	RS	RL	
Possible surface diversion area or existing district but presently without adequate allocation, or areas with water-bearing alluviums but outside identified groundwater basins, or younger volcanics (i.e., quaternary era) as identified in DWR Bulletin #118, September 1975.	RS	RS	RS	RL	
Outside a water district or possible expansion area of a district and areas of non-water bearing materials as identified in DWR Bulletin #118, September 1975.	RL	RL	RL	RL	

¹Significant unused allocation is 1,000+ acre feet per year

KEY: UR - Urban SR - Suburban RS - Rural-Residential-Small Lot
 I - Industrial C - Commercial RL - Rural-Residential-Large Lot

Source: Sedway/Cooke

TABLE SLR-I: SOLID WASTE GENERATION 1982-2000

<u>SOURCE¹</u>			<u>TONS/YEAR²</u>		
	<u>1982</u>	<u>1985</u>	<u>1990</u>	<u>1995</u>	<u>2000</u>
Residential	12,221	14,035	16,914	19,655	22,301
Commercial	10,935	12,558	15,138	17,586	19,954
Construction/ Demolition	<u>2,573</u>	<u>2,955</u>	<u>3,562</u>	<u>4,138</u>	<u>4,695</u>
TOTAL	25,729	29,548	35,619	41,379	46,950

¹ Assumes the following pounds per capita per day source generation factors:

residential - 1.9
 commercial - 1.7
 construction/
 demolition - .4

² Assumes land fill operates 6 days per week, based upon the following General Plan population estimates and projections:

1982 - 41,100
 1985 - 47,200
 1990 - 56,900
 1995 - 66,100
 2000 - 75,000

Source: Tehama County Solid Waste Management Plan, 1975, and Sedway/Cooke, 1982.

TABLE SLR-2: CURRENT TEHAMA COUNTY SCHOOL ENROLLMENT AND CAPACITY LEVEL

<u>District</u>	<u>Enrollment</u>	<u>Capacity</u>	<u>Percent of Capacity</u>
Antelope	386	625	62
Bend	78	80	98
Corning Elementary	1,100	1,081	102
Corning High	630	750	84
Elkins	37	90	41
Evergreen	520	620	84
Flournoy	20	50	40
Gerber	360	420	86
Kirkwood	NA	25	NA
Lassen View	260	300	87
Los Molinos Unified	541	640	85
Manton	65	120	54
Mineral	32	50	64
Plum Valley	40	50	80
Red Bluff Elementary	1,603	1,723	93
Red Bluff High	1,685	1,937	87
Reeds Creek	80	120	67
Richfield	90	120	75

NA - Data Not Available

Source: Tehama County Department of Education and Sedway/Cooke, 1982.

**TABLE SLR-3: ESTIMATED STUDENT POPULATION GROWTH,
1982-1987**

Planning Area	Dwelling Unit Growth, 1982-1987 <u>Unincorp/Incorp</u>	School District	(%)	Student Population Growth, 1982-2000	
				K-8	9-12
NORTH I-5	1,649/506	Antelope	10	71	
		Bend	1	7	
		Evergreen	35	248	
		Red Bluff E	50	463	
		Red Bluff H	100		582
		Lassen View	1	7	
		Reeds Creek	3	21	
CENTRAL I-5	114/6	Red Bluff E	5	3	
		Red Bluff H	60		18
		Lassen View	30	15	
		Los Molinos E	30	15	
		Los Molinos H	40		13
		Gerber	30	15	
		Corning E	5	3	
SOUTH I-5	432/212	Corning E	60	166	
		Los Molinos H	20		23
		Los Molinos E	10	19	
		Vina	2	4	
		Richfield	3	6	
		Kirkwood	1	2	
		Corning H	80		139
		Gerber	24	45	
EASTERN REGION	60	Manton	20	5	
(unincorporated)		Mineral	10	3	
		Plum Valley	15	4	
		Los Molinos H	40		6
		Red BLuff H	60		10
		Antelope	10	3	
		Bend	5	1	
		Lassen View	40	10	
WESTERN REGION	30	Evergreen	50	6	
(unincorporated)		Reeds Creek	20	3	
		Gerber	1	1	
		Corning H	40		1
		Elkins	2	1	
		Flournoy	2	1	
		Corning E	5	1	
		Red Bluff E	20	3	
		Red Bluff H	60		4

i - insignificant

Source: Sedway/Cooke

TABLE SLR-4: TEHAMA COUNTY LIBRARY BOOK CIRCULATION VOLUME 1975-1981

<u>Fiscal Year</u>	<u>Tehama County Circulation</u>	<u>Circulation Per Capita</u>	<u>Red Bluff Circulation</u>	<u>Circulation Per Capita</u>	<u>Total Volumes</u>	<u>Total Titles</u>
1975-1976	168,101	5.1	96,918	11.5	119,095	72,380
1976-1977	166,352	4.9	97,565	11.5	127,900	79,702
1977-1978	195,114	5.6	103,909	11.7	120,877	79,343
1978-1979	190,423	5.3	107,424	11.5	118,048	77,966
1979-1980	260,367	6.8	175,481	18.5	125,302	79,625
1980-1981	284,315	7.1	183,527	18.7	127,584	80,464

Source: Tehama County Library, 1982.

TABLE SLR-5: TEHAMA COUNTY REGISTERED BORROWERS 1981

Red Bluff	10,920
Corning	1,030
Los Molinos	279
Gerber	215
Tehama	86
Vina	108
Bend	8
Berrendos	9
Evergreen	19
Manton	24
Mineral	NA
 COUNTY TOTAL	 12,698

NA - Data Not Available.

Source: Tehama County Library, 1982.

**TABLE SLR-6: TEHAMA COUNTY LIBRARY SPACE REQUIREMENTS,
1985-2000***

<u>Year</u>	<u>Population Projection</u>	<u>Circulation Projection</u>	<u>Volumes¹ Projection</u>	<u>Estimated Building Needs in Sq. Ft.</u>
1980	39,400	260,367	87,102	
1985	47,200	335,120	107,102	20,848
1990	56,900	403,990	127,102	24,570
1995	66,100	469,310	147,102	28,411
2000	75,000	532,500	167,102	32,103
1981	40,100	284,315	91,308	15,399 recommended
				4,200 existing main 4,040 existing storage

¹Volumes estimated at 6,000 volumes added per year from 1979/80 base less 2,000 discarded annually (4,000 total added).

*Projections for Tehama County Library (Main) using General Plan population projections.

Source: Tehama County Library, 1982.

TABLE SLR-7: RESIDENTIAL CONSTRUCTION TAX FOR PARK AND RECREATION DEVELOPMENT: CITIES OF RED BLUFF AND CORNING

	<u>Use</u>	<u>Residential Construction Tax</u>
Red Bluff	Mobile Home	\$155/lot
	Single Family	\$155/one bedroom unit
	Single Family	\$200/two bedroom unit
	Single Family	\$240/three or more bedroom unit
Corning	Mobile Home	\$124/lot
	Single Family	\$124/one bedroom unit
	Single Family	\$158/two bedroom unit
	Single Family	\$191 three or more bedroom unit

Source: Cities of Red Bluff and Corning and Sedway/Cooke, 1982.

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
AG-a, d	Zoning map revision to reflect revised zoning ordinance.	Within one year of Plan adoption.	Planning Department	Additional staff time to draft zoning map revisions.
AG-b	Review of existing and potential agricultural lands.	Every five years to coincide with General Plan adoption.	Planning Department, Agricultural Advisory Committee	Require additional staff time for review work and for coordination of committee.
AG-e	Regulations governing division of agricultural lands.	On-going	Planning Department	
AG-c, f	Zoning ordinance revision to reflect this policy.	Within one year of Plan adoption.	Planning Department*	Additional staff time to draft zoning map revisions.
AG-g	Zoning ordinance revisions for Williamson Act lands.	Within one year of Plan adoption.	Planning Department, County Counsel.	Requires additional staff time; may increase lands under contract.

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
T-a, b, e	Zoning ordinance revision to reflect this policy.	Within one year of Plan adoption.	Planning Department	Additional staff time to revise zoning maps.
T-c	Adoption of compatible classification of lands adjacent to timberlands.	Coincides with Plan adoption.	Planning Department	
T-d,f	County promotion of forest improvement practices and programs.	Within one year of Plan Adoption.	Board of Supervisors Resolution	

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
W-a	Preservation of groundwater recharge areas identified on Plan Land Use Maps.	On-going	Planning Department	May require funding for special studies of groundwater recharge areas.
W-b	Contact California State legislative representatives for appropriate legislation.	On-going	County Counsel, applicable County legislative bodies	
W-c	Prevent water pollution from point and non-point sources.	On-going	Tehama County Agricultural Commission, Regional Water Quality Control Board, and Department of Water Resources.	
W-d	Review of all land division proposals within Los Molinos Mutual Water District.	On-going	Planning Department	
W-e	Future revision of Plan Land Use Maps adjacent to water projects.	On-going	Planning Department	

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
A-a	Consideration of air quality impacts of land use decisions.	Upon adoption of General Plan.	Planning Department	
A-b	Requirement for burning permits.	On-going	Tehama County Agricultural Commission, Air Quality Management District	
WR-a	Zoning ordinance and zoning map revision to reflect identified areas on Plan Land Use Maps.	Upon adoption of General Plan, and on-going.	Planning Department	Staff time to revise zoning maps and to evaluate developments proposed within habitat areas.
WR-b	Notify California Department of Fish and Game to review development proposal.	On-going	California Department of Fish and Game	
WR-c, d	Check location of proposed development with respect to natural habitat locations and significant river and creekside corridors.	On-going	Planning Department	May require trip to the site to assess accurate location of development in relation to resource.

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
WR-e	Minimize environmental impacts.	Upon hydrofacilities development	Municipal Utility, Department of Water Resources, Regional Water Quality Control Board, California Department of Fish and Game	
WR-f	Identify appropriate lands, willing land-owners and available private and public funds.	On-going	Planning Department, Board of Supervisors	Commitment of County fiscal resources for land purchases.
M-a, b, c.	Zoning ordinance revisions for mineral extraction, development of compatible uses, and reclamation plans.	Upon adoption of the General Plan.		
M-c	Review use permit to insure method to reclaim and rehabilitate extraction site is included.	On-going	Planning Department	

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
NRR-a	Revised zoning ordinance, zoning maps to be consistent with Plan's Land Use Maps.	Coincides with adoption of General Plan.	Planning Department	
HA-a, d, e	Regulate impacts to historic and prehistoric sites.	Coincides with adoption of General Plan.	Planning Department	
HA-b, c	Nominate qualified historic sites, promote public education.	On-going	Board of Supervisors, County Historical Commission, County Library.	
CO-a, e, f, g, i	Revise zoning ordinance to ensure adequate developable land supply for residential, commercial, industrial, and growth reserve.	Within one year of Plan's adoption.	Planning Department, County Counsel	Staff time to revise zoning maps.
CO-b	Monitor and report land supply consumption.	Once a year	Planning Department	
CO-c, d	Revise General Plan and amendments as required.	Every five years	Planning Department	Staff time for determination of land consumption and demand based on population growth.

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
CO-h	Develop land capability analysis.	Within one year of Plan's adoption.	Planning Department	
CO(NI-5)-a, b, c, d, e, f, g, h, i; CO(CI-5)-a, b, c, d, e; CO(SI-5)-a, b, c, d, e; CO(E)-a, b, c; CO(W)-a, b, c, d	Zoning map revision to reflect General Plan and zoning ordinance provisions.	Within one year of Plan's adoption.	Planning Department	Staff time to revise zoning maps.
WS-a	Revise zoning maps and land division ordinances to locate future development according to water supply.	Within one year of Plan's adoption.	Planning Department, County Counsel	Staff time for zoning map revisions.
WS-b	Revise County Building Codes and landscape specifications to promote water conservation.	Within one year of Plan's adoption.	Building Department, Planning Department	

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
WT-a	Revise zoning maps and land division ordinances to locate future growth according to wastewater treatment availability.	Within one year of Plan adoption.	Planning Department, County Counsel	Staff time for zoning map revisions.
WT-b	Regulate experimentation with alternative wastewater treatment systems.	On-going	Environmental Health Department	
SW-a	Identify and evaluate future solid waste disposal sites.	Within next five years.	Road Department	
SW-b	Cost-effective solid waste disposal	On-going	Board of Supervisors	

TABLE GPI-I: TEHAMA COUNTY GENERAL PLAN IMPLEMENTATION (Continued)

POLICY	ACTION	TIMING	RESPONSIBLE AGENCY	FISCAL IMPLICATIONS
SLR-a	County/School Districts data exchange	On-going	Planning Department, School Districts	
SLR-b	School capacity verification	On-going	Planning Department, School District, and Project developer	
SLR-c	Monitor library needs	On-going	County Librarian	Funding via capital improvement program
SLR-d	Dedication of park area or in lieu fee, adopt ordinance and revise land division standards	Within one year of Plan's adoption	Planning Department, Board of Supervisors	Reduce future cost of recreation and park provision

Environmental Impacts

INTRODUCTION AND SUMMARY

LEGAL REQUIREMENTS. An assessment of environmental impacts is required prior to the adoption or revision of a general plan under the California Environmental Quality Act (CEQA) and the State EIR Guidelines. While the general plan and a general plan EIR are legally distinct documents, their required contents overlap considerably. For this reason, Title 14 Section 15148 of the California Administrative Code provides local governments the opportunity to jointly prepare and publish a general plan and its EIR as one single document.

When combined, the general plan must contain all the requirements of an EIR as stated below by Article 9 of the State EIR Guidelines. Due to the nature of a general plan the EIR need not be as specific as that of an individual project. (Government Code Section 15147(b)). Required contents of a draft EIR on a General Plan are:

- Description of the Project.
- Description of the Environmental Setting.
- Significant effects which cannot be avoided if the proposal is implemented. (Government Code Section 15143(b)).
- Mitigation measures proposed to minimize the significant effects (Government Code Section 15143(c)).
- Alternatives to the proposed action (Government Code Section 15143(d)).
- The relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity (Government Code Section 15143(e)).
- Significant environmental impacts which would be involved in the proposed action should it be implemented (Government Code Section 15143(f)).
- The growth-inducing impacts of the proposed action (Government Code Section 15143(g)).

- Effects found not to be significant (Government Code Section 15143.5).
- A list of organizations and persons consulted (Government Code Section 15144).

The combined EIR/general plan document must also contain a special section identifying where in the general plan each of the above EIR requirements is discussed. This section of the Tehama County General Plan is intended to meet this requirement. In addition to being a reference document, this section summarizes significant environmental impacts and their mitigation measures.

EIR REQUIREMENTS

DESCRIPTION OF THE PROJECT. The EIR should identify the jurisdiction's location and the boundaries of the planning area. Additionally, it should summarize the major policies and objectives of the plan if the EIR is prepared as a separate document.

Location and Boundaries.

Part One-Preface

- Conceptual Basis of the General Plan
 - Description of Plan Concept
 - Figure PRE-1: Tehama County Planning Area Mapping System

Part Three-Element Groups

- Community Development Group
 - Development Pattern and Community Organization Element (Findings)

Major Policies and Objectives.

Part One-Preface

- Conceptual Basis of the General Plan

Part Three-Element Groups

- Public Safety Group (see existing General Plan)
- Resources Group (see individual elements: Policies)
- Community Development Group (see individual elements: Policies)

ENVIRONMENTAL SETTING, SIGNIFICANT IMPACTS, AND MITIGATION MEASURES.
"The EIR should further describe the local and regional environment, emphasizing those features likely to be affected by the plan and the environmental constraints and resources that are rare or unique to the area. It should detail existing physical facilities, such as roads, water systems, and sewage treatment facilities, along with their capacities and current levels of use. It should also discuss any inconsistencies between the proposed plan and adopted regional plans.

"Next, the EIR should evaluate the policies and proposals in the plan which involve the commitment of land or which lead to alterations in the physical environment. The evaluation should include changes in population, the pattern of settlement, and the use of land, including commercial, industrial, and residential development. In addition, this section should discuss the cumulative effects of the plan's policies and proposals, one of the most important functions of a general plan EIR.

"The EIR should describe the significant effects of the policies and proposals in the plan, including those that can be reduced to an insignificant level but not eliminated. Where there are consequences that cannot be alleviated without imposing another design, the EIR should discuss their implications and the reasons why the policies and proposals are being advanced, notwithstanding their effects.

"If the assessment shows that specific policies or proposals will result in significant adverse effects if implemented, the EIR should identify measures to alleviate them. The general plan EIR is a particularly useful tool for identifying measures to mitigate the cumulative effects of subsequent projects. For example, a general plan might call for a significant increase in industrial employment in the community. If this proposal would lead to increased automobile commuting, the EIR could identify measures to increase housing opportunities within the community to minimize the volume of long-distance commuting. Where other agencies are responsible for mitigating the effects of a proposal, they should be identified." (General Plan Guidelines)

Earth. Setting and Impacts.

Existing Tehama County General Plan

- Safety and Seismic Safety Element
 - Part One, C. Exhibits; Geological Hazards.

Revised Tehama County General Plan (Draft)

Part Three - Element Groups

- Resources Group:
 - Water and Water Quality (Findings, Environmental Impacts)
 - Wildlife Resources (Findings)
 - Minerals (Findings, Environmental Impacts)
- Community Development Group:
 - Development Pattern and Community Organization (Findings, Environmental Impacts)

Summary of Impacts. An unavoidable impact of the Revised General Plan will be the consumption of presently undeveloped lands to accommodate future growth. Changes in topography will also result as new roads and building foundations are construction. The increased number of paved surfaces, mineral extraction operations, and the removal of riparian vegetation may contribute to increased damages from soil erosion.

Mitigation Measures.

Existing Tehama County General Plan

Safety and Seismic Safety Element

- V - Implementation Proposals

Revised Tehama County General Plan (Draft)

Part Three - Element Groups

- Resources Group
 - Policies W-a; M-e, WR-c
- Community Development Group
 - Planning Area Policies
 - Policies CO-g, CO-i

Summary of Mitigation Measures. The development pattern established by the General Plan would accommodate future growth in areas of the County away from slope instability or fault areas identified in the existing Safety and Seismic Safety Element. (See also Technical Report #3: Development Capability Analysis.) The development pattern should also reduce impacts on topography by allowing compact growth patterns and utilization of existing roads wherever possible.

Water and soil erosion resulting from paved surfaces, removal of riparian vegetation and mineral extraction operations should be reduced by provisions for clustered development, open space retention, and setback requirements.

Air. Setting and Impacts.

Part Three - Elements Group

- Resources Group
 - Timberlands (Findings)
 - Air Quality (Air Quality Issues)
 - Energy (Findings)
- Community Development Group
 - (Findings, Environmental Impacts)

Summary of Impacts. Air quality will not be significantly affected as the result of Tehama County growth. Impacts on air quality from agricultural/lumber burning, agricultural land preparation/maintenance/harvesting (dust and odors) and wood burning stoves (particulate matter) are recognized as being localized temporarily and not significant at the countywide scale.

Mitigation Measures.

- Policies A-a, A-b, A-c, A-d
- Community Organization and Development Element: All Planning Area Policies.

Summary of Mitigation Measures. The development pattern proposed by the General Plan would partially mitigate significant air quality impacts by concentrating future growth in already developed areas served by paved roads. This should have the effect of reducing auto trip lengths between home and work centers and minimizing the impacts of dust and dirt associated with gravel roads.

Water. Setting and Impacts.

Part Three - Element Groups

- Resources Group
 - Water and Water Quality (Findings)
 - Wildlife Resources (Specific Wildlife Planning Issues)

Summary of Impacts. The General Plan will not result in significant impacts on water supplies. The majority of future development within the County will be concentrated in the I-5 planning areas which roughly corresponds to the boundaries of the Sacramento Valley Groundwater Basin. Safe yields from this

basin are expected to be sufficient to meet domestic demands to the year 2000 and beyond.

Significant impacts are anticipated, however, on water quality. The greater incidence of paved surfaces as a result of increased growth and development facilitate the runoff of dirt, litter, and settled air pollutants into surface waters. Similarly, the continuation of agricultural activities along rivers or creeks pose threats to water quality, as animal wastes and a variety of chemicals are discharged into surface flows through irrigation ditch drains.

Significant water quality impacts may also arise in areas of the County where growth has been allocated on soils poorly suited to naturally treat septic tank effluent. Such is the case in the Los Molinos and Antelope Valley areas, where leach line seepage and backup is already suspect of contaminating domestic water supplies.

Grading or clear cutting of native vegetation along surface watercourses hastens natural erosion processes and increases sedimentation, a major source of water pollution, which is also considered a significant impact.

The flow of flood waters would be altered should one or all of the proposed water projects be authorized and constructed, although this would be a reduction in flows, not an increase, and therefore not significant.

Mitigation Measures.

- Policies W-a, W-c, W-f, WR-c, WR-d, WT-b.

Summary of Mitigation Measures. The General Plan policies noted above will substantially mitigate any adverse impacts on the water environment. Mitigation shall be achieved in part through the prohibition of development in groundwater recharge areas; monitoring of waste discharges into surface waters; septic/leachfield systems siting and design regulations; vegetation removal restrictions along watercourses; and the requirement of reclamation plans in compliance with the State Mining and Reclamation Act.

Plant and Animal Life. Setting and Impacts.

Part Three - Element Groups

- Resources Group
 - Wildlife Resources Element (Findings, Issues)

Summary of Impacts. Impacts on plant and animal populations as a result of General Plan implementation will not, in general, be significant. Rare or endangered species should not suffer any significant adverse impacts in terms of reduced diversity or numbers.

An unavoidable adverse impact of the General Plan, however, will be the deterioration of wildlife habitats in and around proposed residential growth areas.

Deterioration of fish habitats is also expected to be significant. Of particular concern are the operations of small scale hydroelectric projects and the use of agricultural diversion dams.

Mitigation Measures.

- Wildlife Resources Element
 - Policies WR-a,b,c,d,f

Summary of Mitigation Measures. Significant plant and animal populations such as riparian communities, rare bird habitats and significant fishing streams will be protected from adverse impacts by designation as one of the five subcategories of the Natural Resource Conservation Land Use Classifications. Inherent in these land use categories are regulations affecting vegetation removal, requirements for siting and clustering of structures and the use of setbacks. In addition, types of land uses and allowable density would also be limited. These mitigating measures should at least partially reduce the impacts on wildlife habitats surrounding future residential areas.

Policies contained in the Wildlife Resources Element and the Energy Element should reduce impact of hydroelectric projects/diversion dams on fish by requiring maintenance of adequate flows to permit spawning activity during migratory seasons.

Noise. Summary of Impacts. Increased noise generation will be an inevitable result of growth and development in Tehama County. The existing Noise Element contains guidelines which would locate future noise-sensitive land uses (e.g. hospitals, residential areas) away from noise generating uses (industry, freeway). The Noise Element also proposes measures which would reduce noise impacts of adjacent land uses through the implementation of standards and controls contained in the element.

The development pattern presented in the Revised General Plan also reduces potential noise impacts by concentrating noise generating land uses only in areas already noise impacted. (See also the Circulation Element - Implications of the Circulation System to Air Quality, Energy, Noise, Safety, and Public Finance; and Policies C-k, H-h.)

Housing. Setting and Impacts. Existing housing conditions in Tehama County are presented in the Tri-County Housing Element; Housing Plan, Programs and Needs.

Summary of Impacts. Additional demand for housing is an inevitable secondary impact of growth. The Revised Tehama County General Plan would not create additional demand, but rather accommodate year 2000 housing needs in the County as identified in Technical Paper #2: Population, Housing, and Employment Projections.

Moreover, housing needs would be accommodated in a variety of ways by allowing for a wide range of living environments, ranging from large-lot rural residences providing no urban services to urban residences offering access to all urban services.

Mitigation Measures.

- Community Organization and Development Pattern Element (Policies CO-e, CO-f).

Transportation/Circulation. Setting and Impacts.

Part Three - Element Groups

- **Community development Group**
 - Community Organization and Development Pattern Element (Findings)

Summary of Impacts. Future residential growth in the Bowman and Lake California areas will result in significant traffic volume increases along Bowman Road and Lake California Drive, as these roads are the primary access routes to Interstate 5. The Bowman Road interchange will also be significantly impacted by the residential growth in these areas.

Significant increases in peak hour traffic volumes will also be experienced along roads serving future residential growth within and in the vicinity of Red Bluff.

The General Plan will not significantly impact present circulation patterns for the movement of goods by water, rail, or air.

The 1980 Tehama County Regional Transportation Plan identifies the need to improve mobility for the County's transit dependent population. Without individual automobiles, this sector of the community includes the sizable share of the County's retirement and elderly citizens, who must rely on friends, relatives, taxi services, and social service agencies for transport. The transit dependent population also includes individuals below the age of 16 who must rely on parents and friends for transportation. The physically disabled and mentally retarded also are included in the transit population. Lastly, those individuals who cannot afford to own and operate an automobile are included in the population of the transit-dependent.

Mitigation Measures.

Part Three - Element Groups

- **Community Development Group**
 - Community Organization and Development Pattern Element: Policy CO-g

Summary of Mitigation Measures. To mitigate these significant impacts the Plan identifies road improvement needs in order to accommodate future projected peak hour traffic volumes and also presents minimum road design standards.

The Plan also encourages land use patterns that will in the future facilitate transit operations and recommends the provision of community and shopping facilities in close proximity to higher density living areas where they are readily accessed by the transit-dependent population. Also, non-motorized bicycle routes are suggested for urban areas of the County to provide opportunities for mobility by the young transit-dependent population.

Public Services. Setting and Impacts.

Part Three - Element Groups

- **Community Development Group**
 - Community Organization and Development Pattern Element (Findings)

- Public Facilities Element - Water Supply, Wastewater Treatment, and Solid Waste Disposal (Findings)
- Public Facilities Element - Schools, Libraries, and Recreation Facilities (Findings)

Summary of Impacts. Increased development of the residential, commercial, and industrial sectors in Tehama County will cause an increased demand for water services, wastewater services, and solid waste services. The ability to meet these demands in a timely fashion may constrain development in certain areas of the County. In particular, the Corning area currently has a moratorium on the issuance of building permits until the Corning Wastewater System is upgraded.

During the planning period, it may be expected that both the Red Bluff and Corning Wastewater treatment plants and their associated infrastructure will require expansion as their capacities are reached. Also, the growth projected to occur in the Los Molinos area will, at some point during the planning period, require the construction of a community collection and wastewater treatment system.

Several County school districts are currently operating at or close to capacity levels and will require expansions of facilities and new facilities to accommodate future student population.

The County library system will have to be expanded to meet the needs of the community. In order to maintain its current level of 2.2 books per capita, the library system would require 167,102 books in circulation by year 2000. As the County grows, and urban and suburban areas adjacent to Red Bluff and Corning develop, there will be a demand for local neighborhood parks close to future residential areas. Also, as the County's population ages, there will be a need for senior recreation facilities.

Mitigation Measures.

Part Three - Element Groups

● Community Development Group

- Community Organization and Development Pattern Element:
Policies CO-g, CO(NI-5)-b, CO(E)-a, CO(W)-c
- Public Facilities Element Policies: All

Summary of Mitigation Measures. To minimize impacts to public facilities in the County, the Plan's development pattern recognizes the availability of domestic water supply and the suitability of soils to accommodate individual septic systems and locates rural-small lot residential growth in areas suited for this specified density. In this way, a portion of future growth is accommodated independently of major infrastructure requirements.

Measures to mitigate growth impacts on schools include cooperative planning arrangements between school districts and subdivision review procedures to ensure adequate school capacity. Library services shall be monitored in anticipation of future service needs. Future recreation needs shall be provided through parkland dedications or in lieu fees in areas designated for urban or suburban development. Consultation of standards contained in the

Tehama County Comprehensive Parks and Recreation Plan in conjunction with Quimby Act provisions may also be used to provide future recreation opportunities within Tehama County.

Energy. Setting and Impacts.

Part Three - Element Groups

- Resources Groups
 - Environmental Impacts
- Community Development Group
 - Circulation Element (Implications of the Circulation System to Air Quality, Energy, Noise, Safety, and Public Finance)

Summary of Impacts. Increased energy usage in Tehama County is an unavoidable impact of future growth. However, the General Plan does not encourage activities which would result in the use of large amounts of fuel in wasteful manners.

Significant environmental impacts will accrue as small scale hydropower development increases. The construction of dams or streamwater diversions to off-site power generators may cause water level fluctuations which potentially disrupt wildlife habitats and foraging areas. Dams also create barriers to migrating fish, thereby requiring the installation of fish ladders to maintain travel routes. Diversion of vast amounts of water leaves too little in the stream, thereby preventing any migration at all. Conversely, releasing vast amounts of water to meet peak energy demands could also be detrimental to habitats.

Mitigation Measures.

Part Two - Conceptual Basis of the General Plan

- Description of Plan Concept
 - I-5 Corridor Growth Accommodation Development Pattern

Part Three - Element Groups

- Resources Group
- Community Development Group

Summary of Mitigation Measures. The General Plan is an effective tool in energy conservation. The most significant contribution it makes to energy savings is the proposed land use pattern. The land use pattern presented by this Plan reduces driving distances to shopping and employment centers by locating future residential growth within areas of the County where jobs and commercial trade are already centered. The Plan also establishes provisions for future commercial development in areas outside the I-5 regions, thereby reducing driving time and fuel expenditures for persons who would otherwise need to utilize the services of centers such as Red Bluff or Corning.

As stated in Policy E-h, small hydrofacilities shall be managed to mitigate the above impacts. Management shall be regulated according to regulations and procedures established by the Department of Water Resources, the Regional Water Quality Control Board, and the State Department of Fish and Game.

Open Space, Recreation and Scenic Highways. Setting and Impacts.

Part Three - Element Groups

- Resources Group
 - Agriculture Element (Findings)
 - Timberlands Element (Findings)
 - Wildlife Resources Element (Findings, Issues)

Existing Tehama County General Plan

- Tehama County Parks and Recreation Plan
- Scenic Highways Element

Summary of Impacts. Reduction of the amount of Tehama County open spaces will be a natural result of future population and development growth. The majority of the growth will occur on lands in the I-5 corridor planning areas which are of marginal agricultural value. Open space lands outside of the areas designated to accommodate future growth, however, are also valued for their development potential and thus may experience development pressure despite the fact that lands more suitable for development are located elsewhere.

Mitigation Measures.

Part Three - Element Groups

- Resources Group
 - Agriculture Element (All Policies)
 - Timberlands Element (All Policies)
 - Wildlife Resources Element (All Policies)
 - Open Space and Recreation Element (Policy ROS-a)
- Community Development Group

Existing General Plan

- Tehama County Comprehensive Recreation and Parks Plan
- Scenic Highways Element

Summary of Mitigation Measures. By accommodating future growth away from valuable agricultural, timber or wildlife areas and in regions of the County which already support concentrations of people, open spaces can be substantially maintained.

The proposed General Plan also maintains aesthetic resources important to scenic highways by housing growth in the I-5 region. Development outside this area will be subject to guidelines designed to mitigate visual impacts.

County-serving recreation resources shall be afforded protection under the General Plan by use of the "Recreation" subcategory of the Natural Resource Conservation Land Use Classification. Additional measures, such as the provision of access to recreational opportunities along the Sacramento River, are detailed in the existing General Plan.

Cultural Resources. Setting and Impacts.

Part Three - Element Groups

- Resources Group
 - Historic and Archaeological Element (Findings, Environmental Impacts)

Summary of Impacts. Development in areas of Tehama County supporting significant historic or archaeological sites may result in damage or loss of these resources. Construction of the Thomes-Newville and Cottonwood Creek Projects would preclude future archaeological investigation of sites known to exist in these areas.

Mitigation Measures.

Part Three - Element Groups

• Resource Group

- Historic and Archaeological Element: Policies HA-a, HA-b, HA-d, HA-e

Summary of Mitigation Measures. Policies designed to mitigate adverse impacts on cultural resources include site review by qualified professionals and nomination for protection under state or federal legislation. The impacts on these resources, however, cannot be totally mitigated and are considered significant.

ALTERNATIVES TO PROPOSED GENERAL PLAN. Legal Requirements. "During the development of the general plan, several policy and program alternatives will usually be considered. The EIR should identify and describe each alternative and analyze its relative effects. The 'no project' alternative, which in the case of a general plan normally means no change to the existing plan, must always be evaluated. The discussion of alternatives must include alternatives capable of eliminating any significant environmental effects or reducing them to a level of insignificance, even if those alternatives impede the attainment of the plan's goals and objectives." (General Plan Guidelines)

"No Project" Alternative. The "No project" alternative was not considered based on Section 65300 of the California Government Code which requires all local jurisdictions (Cities and Counties) to adopt a general plan. The existing Tehama County General Plan, partially prepared in 1970, 1974, 1977 and 1981, is not a complete, adequate and internally consistent plan.

Alternatives Attaining Basic Project Objectives. Three alternatives or variations of the General Plan were developed during the planning process and presented in Technical Paper #4, Revised Objectives and Growth Options. One growth option continues the distribution of population and housing units reflected in the 1980 census. Growth would be distributed to each of the five planning areas so that each received its proportionate share of Tehama County's population and housing during the planning period 1981-2000.

A second growth option would act to reinforce existing incorporated cities and focus additional growth within adjacent areas that have land suitable for growth accommodation. Implicit in this concept is a decelerated growth in the remaining portion of the County.

The third growth option represents a variation on the second alternative. In addition to reinforcing growth in and around existing incorporated cities, the third option would channel and focus growth in new areas or within existing community centers. This option would act to slow down the occurrence of dispersed growth.

Specific impacts of each of these options are contained in Technical Report #4, Revised Objectives and Growth Options.

Alternatives Eliminating Adverse Effects. Given the fact that population growth in Tehama County is inevitable, there is no plan which could effectively eliminate all environmental impacts, yet still attain the objectives contained in this Plan. Even if the Plan Objectives were eliminated, the inherently conflicting "goals" of the man-made and natural environments would eventually result in environmental conflict and impact.

SHORT-TERM USES VERSUS LONG-TERM PRODUCTIVITY. Legal Requirements. The long-term need to maintain the quality of the community's environment should be weighed against the short-term use of the environment in a way that may eventually create problems. For example, construction of a major new street may meet short-term demand, but in the long run may encourage development of prime agricultural land and contribute to the degradation of air quality.

Discussion. In the short-term view, County land resources will be consumed for housing, circulation, public facilities, and other uses involved in the accommodation of growth. Accommodation of growth in this way leads to degradation of air quality, loss of open space, losses of cultural resources and increased demands for public services and facilities. Growth accommodation also preempts land from any other uses in the future.

In the long-term, however, the General Plan recognizes the highly valuable resource base of Tehama County by concentrating future growth away from the County's precious and productive natural resources. The Plan provides for the protection and enhancement of agriculture and timberlands, water quality, and wildlife habitat. The long-term productivity of the County without implementation of the General Plan would soon be reduced as the result of haphazard growth patterns and lack of resource protection regulations.

GROWTH INDUCING IMPACTS. Legal Requirements. The EIR should also discuss those policies, proposals, and programs of the General Plan likely to stimulate community growth and development. Obvious examples include plans for street and highway improvements in undeveloped areas and proposals for the expansion of employment in basic industries, both of which are likely to increase pressure for residential development.

The General Plan recognizes that growth and development in Tehama County are inevitable. The amount and rate of this growth, however, are dependent upon factors which do not easily lend themselves to predictions and are thus more difficult to assess accurately in the planning process.

Among the most significant factors determining growth rate and amount are the in-migration of families and retired persons from other more urbanized areas of California. Whether or not these and other trends continue will have substantial impacts on the future populations of Tehama County. If present trends continue, the County population rate can be expected to remain relatively high. If these trends vary, the County population may experience a leveling off in future years.

Given these two alternatives, growth at current rates or a tapering off of growth, two population projections were evaluated. The first assumed a

small population increase (the "low projection" - 59,000 persons by the year 2000); the second assumed a larger increase (the "high projection" - 75,000 persons by year 2000).

A significant growth inducing impact of the proposed General Plan is the adoption of the "high" growth projection. This projection has been used in the subsequent determination of future land demand. Based on this demand, the General Plan provides enough land to accommodate the highest levels of residential, commercial, industrial, and public service growth. The General Plan does not prevent growth, nor is it intended to slow the rate of growth.

Key concepts of the growth accommodation plan are the directing and timing of future development so that County needs for housing, public services and public facilities are met in an orderly and convenient fashion.

One aspect of growth sequencing concerns the monitoring of growth over time to ensure that the land supply inventory keeps pace with the rate of growth. (The need for growth monitoring and its implications for the Plan are discussed in the Data Requirements and Suggested Methodology for Plan Updates section of the Plan.) The other equally important aspect of timing is concerned with the relationship of growth to public services. This relationship means that growth must be consistent with the provision of services and that the level of services provided to an area be consistent with its long-range, as well as its short-range, development potential. The overall thrust of development timing is to achieve a growth pattern which is provided with services in the most cost effective manner.

This objective creates a foundation for policies contained in the Tehama County General Plan.

LIST OF ORGANIZATIONS AND PERSONS CONSULTED. The technical reports contained in the Plan Appendix each contain a list of organizations and persons consulted during the preparation of the General Plan.

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